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Search Results -

Terms	Documents
113 and computer\$1 and server\$1 and (atm or automated teller machine\$1)	42

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Refine Search:

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or automated teller machine\$1)

Search History

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	113 and computer\$1 and server\$1 and (atm or automated teller machine\$1)	42	L14
USPT	(online or on-line or on line) near banking	104	L13
USPT	4903881.pn.	1	L12
USPT	5471575.pn.	1	L11
USPT	5233547.pn.	1	L10
USPT	5221838.pn.	1	L9
USPT	5659165.pn.	1	L8
USPT	5572572.pn.	1	L7
USPT	5590189.pn.	1	L6
USPT	5615257.pn.	1	L5
USPT	5825003.pn.	1	L4
USPT	6064732.pn.	1	L3
USPT	5161231.pn.	1	L2
USPT	5485370.pn.	1	L1

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Search Results - Record(s) 1 through 10 of 42 returned.

☐ 1. Document ID: US 6064990 A

Entry 1 of 42

File: USPT

May 16, 2000

US-PAT-NO: 6064990

DOCUMENT-IDENTIFIER: US 6064990 A

TITLE: System for electronic notification of account activity

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goldsmith; Kevin Scott	Tucson	AZ	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business <u>Machines</u> Corporation	Armonk	NY	N/A	N/A	02

APPL-NO: 9/ 052371

DATE FILED: March 31, 1998

INT-CL: [7] H01J 3/00

US-CL-ISSUED: 705/75; 705/16, 705/39, 705/44, 705/69, 340/825.33, 340/825.34, 379/91.01, 235/379, 235/380, 380/24, 902/40

US-CL-CURRENT: 705/75; 235/379, 235/380, 340/825.33, 340/825.34, 379/91.01, 705/16, 705/39, 705/44, 705/69, 902/40

FIELD-OF-SEARCH: 235/379, 235/420, 235/380, 380/24, 379/91.02, 379/91.01, 382/115, 705/18, 705/42, 705/44, 705/16, 705/17, 705/34, 705/39, 705/40, 705/52, 705/64, 705/69, 705/75, 902/24, 902/40, 340/825.34, 340/825.33

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4075460</u>	February 1978	Gorgens	235/420
<u>4172552</u>	October 1979	Case et al.	235/380
<u>4675815</u>	June 1987	Kuroki et al.	379/37
<u>4678895</u>	July 1987	Tateisi et al.	235/379
<u>5053607</u>	October 1991	Carlson et al.	705/18
<u>5220501</u>	June 1993	Lawlor et al.	380/24
<u>5265033</u>	November 1993	Vajk et al.	395/200.36
<u>5455407</u>	October 1995	Rosen	235/380
<u>5473143</u>	December 1995	Vak et al.	235/380
<u>5500890</u>	March 1996	Rogge et al.	379/91.02
<u>5613012</u>	March 1997	Hoffman et al.	382/115
<u>5615110</u>	March 1997	Wong	705/38
<u>5677955</u>	October 1997	Doggett et al.	380/24
<u>5708422</u>	January 1998	Blonder et al.	340/825.34
<u>5710834</u>	January 1998	Rhoads	382/232
<u>5839063</u>	November 1998	Lee	455/410
<u>9052371</u>	June 1993	Lawlor et al.	380/24

ART-UNIT: 271

PRIMARY-EXAMINER: MacDonald; Allen R.

ASSISTANT-EXAMINER: Alvarez; Raquel

ATTY-AGENT-FIRM: Victor; David W. Konrad Raynes & Victor LLP

ABSTRACT:

Disclosed is a system for notifying a user of account activity, such as a withdrawal from a savings or checking account. A computer system maintains information on financial accounts and electronic user contact information for at least one of the financial accounts, such as a telephone number, e-mail address or pager number. Information on a transaction with respect to one of the financial accounts is received and processed. The computer system then processes the information on the transaction and generates an electronic message providing information on the transaction. The user contact information for the financial account involved in the transaction is processed. The message is then electronically transmitted to the location identified by the user contact information for the financial account.

28 Claims, 4 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 2. Document ID: US 6052710 A

Entry 2 of 42

File: USPT

Apr 18, 2000

US-PAT-NO: 6052710

DOCUMENT-IDENTIFIER: US 6052710 A

TITLE: System and method for making function calls over a distributed network
DATE-ISSUED: April 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Saliba; Bassam A.	Kirkland	WA	N/A	N/A
Grate; Thomas A.	Redmond	WA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 670882

DATE FILED: June 28, 1996

INT-CL: [7] G06F 13/00

US-CL-ISSUED: 709/203

US-CL-CURRENT: 709/203

FIELD-OF-SEARCH: 380/23, 380/49, 395/600, 395/200.9, 395/614, 395/800, 395/200.01, 709/200, 709/201, 709/203, 709/217, 709/218, 709/219, 705/26, 705/27

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5701451</u>	December 1997	Rogers et al.	395/600
<u>5715453</u>	February 1998	Stewart	N/A
<u>5729594</u>	March 1998	Klingman	379/93.12
<u>5774670</u>	June 1998	Montulli	N/A
<u>5809144</u>	September 1998	Sirbu et al.	N/A
<u>5815657</u>	September 1998	Williams et al.	N/A
<u>5826242</u>	October 1998	Montulli	N/A

OTHER PUBLICATIONS

Gaines, Porting Interactive Applications to the Web, Internet, pp. 1-18, Dec. 7, 1995.

Trevor, Exorcising Daemons: a modular and lightweight approach to depolying applications, Internet, pp. 1-11, Mar. 8, 1996.

Special Edition Using HTML, Second Edition; Electronic Version, Que Publishers, see H for HTML, May. 21, 1996.

A Dynamic, Schema-Independent Web Interface for a Relational Database, R.W.Lee and S. Petrov, pp. 1-15, Dec. 12, 1995.

ART-UNIT: 277

PRIMARY-EXAMINER: Meky; Moustafa M.

ATTY-AGENT-FIRM: Lee & Hayes, PLLC

ABSTRACT:

An extensible, bi-directional function calling protocol tunnels function call requests and responses through the HTTP (HyperText Transport Protocol) message stream of a standard Web browser and a standard Web server. In a preferred embodiment, the protocol is used to exchange information between an electronic commerce client application ("commerce client") which runs on the computer of a World Wide Web user, and an electronic commerce server application ("commerce server") which runs on a Web site. The protocol specifies a format for embedding a generic client-to-server function call within HTML (HyperText Markup Language) content such that a user can initiate the function call while viewing an HTML document via the standard Web browser. Specialized functions such as "get price," "get inventory," and "calculate tax" can thereby be placed within standard Web documents, such as electronic catalog documents used by online merchants to sell products. Client-to-server function calls are passed as HTTP POST messages from the Web browser to the Web server; server-to-client

function calls are passed as MIME messages returned to the Web browser. Because all information is passed using standard HTTP messages, end users can access the electronic commerce system from behind Internet firewalls that permit the passage of HTTP traffic.

33 Claims, 10 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWMC	Image
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☐ 3. Document ID: US 6052785 A

Entry 3 of 42

File: USPT

Apr 18, 2000

US-PAT-NO: 6052785

DOCUMENT-IDENTIFIER: US 6052785 A

TITLE: Multiple remote data access security mechanism for multitiered internet computer networks

DATE-ISSUED: April 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lin; David Dah-Haur	Austin	TX	N/A	N/A
Shaheen; Amal Ahmed	Austin	TX	N/A	N/A
Yellepeddy; Krishna Kishore	Austin	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY	N/A	N/A	02

APPL-NO: 8/ 976401

DATE FILED: November 21, 1997

INT-CL: [7] G06F 13/14

US-CL-ISSUED: 713/201; 709/225

US-CL-CURRENT: 713/201; 709/225

FIELD-OF-SEARCH: 713/201, 714/1, 709/223, 709/225, 709/227, 709/249, 380/4

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5586121</u>	December 1996	Moura et al.	370/404
<u>5586260</u>	December 1996	Hu	395/200.2
<u>5706507</u>	January 1998	Schloss	395/615
<u>5748897</u>	May 1998	Katiyar	395/200.49
<u>5867667</u>	February 1999	Butman et al.	395/200.79
<u>5896798</u>	April 1999	Dent et al.	395/187.01
<u>5903721</u>	May 1999	Sixtus	395/187.01
<u>5915119</u>	June 1999	Cone	395/750.02

ART-UNIT: 277

PRIMARY-EXAMINER: Palys; Joseph E.

ASSISTANT-EXAMINER: Omar; Omar A.

ATTY-AGENT-FIRM: LaBaw; Jeffrey S. Walker; Mark S.

ABSTRACT:

A system and method for managing client authorization to access remote data repositories through a middle tier server such as a web server. Client remote data repository access is intercepted by the middle tier server and the server is searched for stored credentials permitting client access to the remote data repository. If found, the stored credentials are used to authenticate access without further interaction with the client system. If no stored credentials are found, the server requests credentials from the client and passes them to the remote data repository for validation. Validated credentials are stored by the server for future use and indexed by a client identifier. Permitted remote data repository access is stored with the validated credentials. Access to a mounted remote file system is not permitted without authorization even if the remote file system would not otherwise require authorization.

24 Claims, 5 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 4. Document ID: US 6047887 A

Entry 4 of 42

File: USPT

Apr 11, 2000

US-PAT-NO: 6047887

DOCUMENT-IDENTIFIER: US 6047887 A

TITLE: System and method for connecting money modules

DATE-ISSUED: April 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

APPL-NO: 9/ 039933

DATE FILED: March 16, 1998

PARENT-CASE:

This is a divisional of application Ser. No. 08/371,201 filed Jan. 11, 1995, now U.S. Pat. No. 5,898,154 which is a divisional of application Ser. No. 07/794,112 filed Nov. 15, 1991, now U.S. Pat. No. 5,453,601.

INT-CL: [7] G06K 5/00

US-CL-ISSUED: 235/379; 235/492

US-CL-CURRENT: 235/379; 235/492

FIELD-OF-SEARCH: 235/379, 235/375, 235/382.5, 235/492

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3573747</u>	April 1971	Adams et al.	N/A
<u>3749887</u>	July 1973	Guiliani	N/A
<u>3852571</u>	December 1974	Hall et al.	N/A

<u>3906460</u>	September 1975	Halpern	N/A
<u>3932730</u>	January 1976	Ambrosio	N/A
<u>3934122</u>	January 1976	Riccitelli	N/A
<u>3937925</u>	February 1976	Boothroyd	N/A
<u>3971916</u>	July 1976	Moreno	N/A
<u>4001550</u>	January 1977	Schatz	N/A
<u>4007355</u>	February 1977	Moreno	N/A
<u>4053735</u>	October 1977	Foudos	N/A
<u>4120452</u>	October 1978	Kimura et al.	N/A
<u>4172552</u>	October 1979	Case et al.	N/A
<u>4179064</u>	December 1979	Yoshioka et al.	N/A
<u>4214230</u>	July 1980	Fak et al.	N/A
<u>4218582</u>	August 1980	Hellman et al.	N/A
<u>4224666</u>	September 1980	Giraud	N/A
<u>4256955</u>	March 1981	Giraud et al.	N/A
<u>4270042</u>	May 1981	Case	N/A
<u>4277837</u>	July 1981	Stuckert	N/A
<u>4302810</u>	November 1981	Bouricius et al.	N/A
<u>4305059</u>	December 1981	Benton	N/A
<u>4320387</u>	March 1982	Powell	N/A
<u>4321672</u>	March 1982	Braun et al.	N/A
<u>4341951</u>	July 1982	Benton	N/A
<u>4404649</u>	September 1983	Nunley et al.	N/A
<u>4405829</u>	September 1983	Rivest et al.	N/A
<u>4442345</u>	April 1984	Mollier et al.	N/A
<u>4443027</u>	April 1984	McNeeley et al.	N/A
<u>4453074</u>	June 1984	Weinstein	N/A
<u>4454414</u>	June 1984	Benton	N/A
<u>4460965</u>	July 1984	Trehn et al.	N/A
<u>4467139</u>	August 1984	Mollier	N/A
<u>4498000</u>	February 1985	Decavele et al.	N/A
<u>4511970</u>	April 1985	Okano et al.	N/A
<u>4523087</u>	June 1985	Benton	N/A
<u>4523297</u>	June 1985	Ugon et al.	N/A
<u>4529870</u>	July 1985	Chaum	N/A
<u>4536647</u>	August 1985	Atalla et al.	N/A
<u>4549075</u>	October 1985	Saada et al.	N/A
<u>4575621</u>	March 1986	Dreifus	N/A
<u>4597046</u>	June 1986	Musmanno et al.	N/A
<u>4614861</u>	September 1986	Pavlov et al.	N/A
<u>4625276</u>	November 1986	Benton et al.	N/A
<u>4629872</u>	December 1986	Hallberg	N/A
<u>4630201</u>	December 1986	White	N/A
<u>4634845</u>	January 1987	Hale et al.	N/A
<u>4642768</u>	February 1987	Roberts	N/A
<u>4650978</u>	March 1987	Hudson et al.	N/A
<u>4667088</u>	May 1987	Kramer et al.	N/A
<u>4673802</u>	June 1987	Ohmae et al.	N/A
<u>4689478</u>	August 1987	Hale et al.	N/A
<u>4692601</u>	September 1987	Nakano	N/A
<u>4697073</u>	September 1987	Hara	N/A

<u>4705211</u>	November 1987	Honda et al.	N/A
<u>4722055</u>	January 1988	Roberts	N/A
<u>4723284</u>	February 1988	Munck et al.	N/A
<u>4727243</u>	February 1988	Savar	N/A
<u>4727244</u>	February 1988	Nakano et al.	N/A
<u>4734568</u>	March 1988	Watanabe	N/A
<u>4736094</u>	April 1988	Yoshida	N/A
<u>4742215</u>	May 1988	Daughters et al.	N/A
<u>4748668</u>	May 1988	Shamir et al.	N/A
<u>4750119</u>	June 1988	Cohen et al.	N/A
<u>4751640</u>	June 1988	Lucas et al.	N/A
<u>4752676</u>	June 1988	Leonard et al.	N/A
<u>4752877</u>	June 1988	Roberts et al.	N/A
<u>4757185</u>	July 1988	Onishi	N/A
<u>4759064</u>	July 1988	Chaum	N/A
<u>4766293</u>	August 1988	Boston	N/A
<u>4766539</u>	August 1988	Fox	N/A
<u>4767920</u>	August 1988	Kitta et al.	N/A
<u>4799156</u>	January 1989	Shavit et al.	N/A
<u>4822984</u>	April 1989	Remery et al.	N/A
<u>4823264</u>	April 1989	Deming	N/A
<u>4825052</u>	April 1989	Chemin et al.	N/A
<u>4827112</u>	May 1989	Yoshino et al.	N/A
<u>4837422</u>	June 1989	Dethloff et al.	N/A
<u>4839504</u>	June 1989	Nakano	N/A
<u>4864109</u>	September 1989	Minematsu et al.	N/A
<u>4877947</u>	October 1989	Mori	N/A
<u>4879747</u>	November 1989	Leighton et al.	N/A
<u>4906828</u>	March 1990	Halpern	N/A
<u>4914698</u>	April 1990	Chaum	N/A
<u>4926480</u>	May 1990	Chaum	N/A
<u>4941173</u>	July 1990	Boule et al.	N/A
<u>4949380</u>	August 1990	Chaum	N/A
<u>4959788</u>	September 1990	Nagata et al.	N/A
<u>4962530</u>	October 1990	Cairns	N/A
<u>4964164</u>	October 1990	Fiat	N/A
<u>4968873</u>	November 1990	Dethloff et al.	N/A
<u>4973828</u>	November 1990	Naruse et al.	N/A
<u>4977595</u>	December 1990	Ohta et al.	N/A
<u>4985833</u>	January 1991	Oncken	N/A
<u>4987593</u>	January 1991	Chaum	N/A
<u>4991210</u>	February 1991	Chaum	N/A
<u>4992646</u>	February 1991	Collin	N/A
<u>4995081</u>	February 1991	Leighton et al.	N/A
<u>4996711</u>	February 1991	Chaum	N/A
<u>5012076</u>	April 1991	Yoshida	N/A
<u>5128997</u>	July 1992	Pailles et al.	N/A
<u>5162989</u>	November 1992	Matsuda	N/A
<u>5175416</u>	December 1992	Mansvelt et al.	N/A
<u>5191193</u>	March 1993	LeRoux	N/A

<u>5212789</u>	May 1993	Rago	707/8
<u>5220501</u>	June 1993	Lawler et al.	N/A
<u>5221838</u>	June 1993	Gutman et al.	N/A
<u>5231569</u>	July 1993	Myatt et al.	N/A
<u>5305200</u>	April 1994	Hartheimer et al.	N/A
<u>5379344</u>	January 1995	Larsson et al.	N/A
<u>5418854</u>	May 1995	Kaufman et al.	N/A
<u>5453601</u>	September 1995	Rosen	N/A
<u>5455407</u>	October 1995	Rosen	N/A
<u>5473692</u>	December 1995	Davis	N/A
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<u>5568552</u>	October 1996	Davis	N/A
<u>5898154</u>	April 1999	Rosen	N/A

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0 172 670 A2	February 1986	EP
391261 B1	February 1986	EP
0 346 180 B1	December 1989	EP
0 416 916 A2	March 1991	EP
417 007 A1	March 1991	EP
0 421 808 A2	April 1991	EP
0 500 956 A1	September 1992	EP
0 621 570 A1	October 1994	EP
54-017098	February 1979	JP
54-119859	September 1979	JP
57-094877	June 1982	JP
58-57784	December 1983	JP
59-151280	August 1984	JP
60-008978	January 1985	JP
60-146361	August 1985	JP
60-198683	October 1985	JP
60-196874	October 1985	JP
61-052793	March 1986	JP
61-043034	March 1986	JP
61-94177	May 1986	JP
61-166680	July 1986	JP
61-38519	August 1986	JP
61-233822	October 1986	JP
62-025372	February 1987	JP
62-080761	April 1987	JP
62-275784	November 1987	JP
62-254248	November 1987	JP
62-293469	December 1987	JP
63-44274	February 1988	JP
63-32658	February 1988	JP
63-39099	February 1988	JP
63-168771	July 1988	JP
63-204495	August 1988	JP

63-245591	October 1988	JP
63-257885	October 1988	JP
63-257089	October 1988	JP
63-308669	December 1988	JP
1-290096	November 1989	JP
2-1049	January 1990	JP
2-116966	May 1990	JP
3-73065	March 1991	JP
3-92966	April 1991	JP
4-080866	March 1992	JP
4-227567	August 1992	JP
5-504643	July 1993	JP
6-503913	April 1994	JP
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WO 9 116 691	October 1991	WO
WO 9 117 528	November 1991	WO
WO 9 308 545	April 1993	WO

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ART-UNIT: 286

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ASSISTANT-EXAMINER: Tremblay; Mark

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ABSTRACT:

An improved monetary system using electronic media to exchange economic value securely and reliably. The invention provides a complete monetary system having electronic money that is interchangeable with conventional paper money comprising (1) issuing banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits, or electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating bank or for

exchanging electronic money with other like transaction devices; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a security arrangement for maintaining the integrity of the system; and (6) reconciliation and clearing processes to monitor and balance the monetary system.

15 Claims, 70 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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5. Document ID: US 6047067 A

Entry 5 of 42

File: USPT

Apr 4, 2000

US-PAT-NO: 6047067

DOCUMENT-IDENTIFIER: US 6047067 A

TITLE: Electronic-monetary system

DATE-ISSUED: April 4, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

APPL-NO: 8/ 994088

DATE FILED: December 19, 1997

PARENT-CASE:

This application is a divisional of application Ser. No. 08/427,287, filed Apr. 21, 1995 now U.S. Pat. No. 5,799,087, which is a continuation-in-part of U.S. application Ser. No. 08/234,461, filed Apr. 28, 1994 now U.S. Pat. No. 5,557,518.

INT-CL: [7] G07F 19/00

US-CL-ISSUED: 380/24; 705/41, 235/379, 902/26

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FIELD-OF-SEARCH: 902/2, 902/26, 235/379, 705/41, 380/24

REF-CITED:

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ART-UNIT: 277

PRIMARY-EXAMINER: Barron, Jr.; Gilberto

ATTY-AGENT-FIRM: Morgan & Finnegan, LLP

ABSTRACT:

An electronic-monetary system having (1) banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits and electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices in off-line transactions; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a clearing bank for balancing the electronic money accounts of the different issuing banks; (6) a data communications network for providing communications services to all components of the system; and (7) a security arrangement for maintaining the integrity of the system, and for detecting counterfeiting and tampering within the system.

An embodiment of the invention includes a customer service module which handles lost money claims and links accounts to money modules for providing bank access.

16 Claims, 56 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 6. Document ID: US 6038633 A

Entry 6 of 42

File: USPT

Mar 14, 2000

US-PAT-NO: 6038633

DOCUMENT-IDENTIFIER: US 6038633 A

TITLE: System and method for providing a dual interrupt mechanism to designate the occurrence and termination of an event

DATE-ISSUED: March 14, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tavallaei; Siamak	Spring	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Compaq <u>Computer</u> Corporation	Houston	TX	N/A	N/A	02

APPL-NO: 8/ 912096

DATE FILED: August 15, 1997

INT-CL: [7] G06F 13/14

US-CL-ISSUED: 710/262; 710/267, 710/268, 714/7, 714/11

US-CL-CURRENT: 710/262; 710/267, 710/268, 714/11, 714/7

FIELD-OF-SEARCH: 395/733-742, 710/102-103, 714/6, 714/15, 714/7, 714/24, 714/8, 714/11, 714/40, 714/42, 714/44, 714/56

REF-CITED:

U.S. PATENT DOCUMENTS

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5526289</u>	June 1996	Dinh et al.	364/557
<u>5542076</u>	July 1996	Benson et al.	395/733
<u>5574667</u>	November 1996	Dinh et al.	364/557
<u>5613129</u>	March 1997	Walsh	395/740
<u>5631800</u>	May 1997	Jin et al.	361/103
<u>5634038</u>	May 1997	Saitoh	395/490
<u>5638895</u>	June 1997	Dodson	165/121
<u>5701494</u>	December 1997	Satoh	395/735
<u>5708814</u>	January 1998	Short et al.	710/260
<u>5768599</u>	June 1998	Yokomizo	395/733
<u>5822547</u>	October 1998	Boesch et al.	710/103

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Semiconductor; Apr. 1995; pp. 1/24.
 "Remote 8-bit I/O expander for I.sup.2 C-Bus" Data Sheet; Philips Semiconductor; Apr. 2, 1997; pp. 1-23.
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 "The PCI (Peripheral Component Interconnect) Bus"; Aug. 6, 1997; pci.txt at www.gl.umbc.edu; pp. 1-7.
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 "The PCI Local Bus"; Accessed Jul. 27, 1997; http://www.rns.com/whats_new/wh_pci.html.
 "PCI Bus Technology" Information Brief; IBM Personal Computing Solutions; Accessed Jul. 27, 1997; <http://www.us.pc.ibm.com/infobrf/ibpci.html>.
 "PCI164 Screamer Functional Diagram" Microway; Accessed Jul. 27, 1997; <http://www.microway.com/block.html>.
 "The PCI (Peripheral Component Interconnect) Local Bus" description of PCI Bus: Accessed Jul. 27, 1997; <http://www.sundance.com/pci.html>.
 "CMOS Bus Switches Provide Zero Delay Bus Communication" Application Note AN-09; Quality Semiconductor Inc.; date unknown; pp. 1-9.
 "High-Performance CMOS Analog 8-Channel Switch" QS4A05Q Preliminary; Quality Semiconductor Inc.; May 30, 1996; pp. 1-7.
 "Quickswitch.RTM. Converts TTL Logic to Hot Plug Operation" Application Note AN-13; Quality Semiconductor Inc.; date unknown; pp. 1-5.

ART-UNIT: 271

PRIMARY-EXAMINER: Sheikh; Ayaz R.

ASSISTANT-EXAMINER: Phan; Raymond N.

ATTY-AGENT-FIRM: Jenkins & Gilchrist, P.C.

ABSTRACT:

A system and an associated method which provides a dual interrupt mechanism to designate the occurrence and termination of an event. In a computer system employing redundant components, upon removal of a defective redundant unit within the computer system, a first interrupt is generated to signal the absence of the unit. Polling or other system monitoring of the status of the absent unit is masked or disabled, thereby eliminating unnecessary polling for the missing unit. Upon replacement of the unit, a second interrupt alerts the computer system of the event termination and cancels the polling mask.

15 Claims, 6 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 7. Document ID: US 6029147 A

Entry 7 of 42

File: USPT

Feb 22, 2000

US-PAT-NO: 6029147

DOCUMENT-IDENTIFIER: US 6029147 A

TITLE: Method and system for providing an interface for supporting multiple formats for on-line banking services

DATE-ISSUED: February 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Horadan; Peter H.	Kirland	WA	N/A	N/A
Vaughan; Richard A.	Seattle	WA	N/A	N/A
Sewelson; Vivian	Seattle	WA	N/A	N/A
Johnstone; Timothy J.	Snohomish	WA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 818203

DATE FILED: March 14, 1997

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION This application claims the benefit of U.S. Provisional Application Ser. No. 60/013,482 filed Mar. 15, 1996.

INT-CL: [7] G06F 17/60

US-CL-ISSUED: 705/35; 705/1, 705/27, 709/232, 235/379

US-CL-CURRENT: 705/35; 235/379, 705/1, 705/27, 709/232

FIELD-OF-SEARCH: 707/1, 707/27, 707/35, 380/52, 235/379, 709/232

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5326959	July 1994	Perazza	235/379
<u>5706442</u>	January 1998	Anderson et al.	707/27
<u>5802307</u>	September 1998	Melo	395/200.62
<u>5815577</u>	September 1998	Clark	380/52

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
0804030	October 1997	GB

OTHER PUBLICATIONS

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Microsoft: Microsoft announces availability of active statement technology for Microsoft Money, M2 Presswire, Nov. 20, 1996.

Microsoft Realeases Money 97, Unveils List Of OFC Partners., Information & Interactive Report. V.17, No. 35, Oct. 4, 1996.

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Networks Update V.3 No. 10, Oct. 1991.

Client/server tools revive CASE. Ricciuti, Mike, Datamation V39, No. 7, p.38(5) Apr. 1, 1993.

ART-UNIT: 275

PRIMARY-EXAMINER: MacDonald; Allen R.

ASSISTANT-EXAMINER: Irshadullah; M.

ATTY-AGENT-FIRM: Jones & Askew, LLP

ABSTRACT:

In association with a computer system, a method and system for providing an interface for establishing connections with financial institution to utilize on-line services. An application program sends a request to a branding server to look up information related to a particular financial institution. The branding server executes the request and, if the branding server contains information relating to the method of connection with identified financial institution, the branding server sends the information to the application program. The application program then loads an appropriate driver corresponding to the method of connection as determined by the branding server. If the method of connection is open financial connectivity (OFC), then the application loads a flexible driver (the OFC driver) which causes the application program to request the business rules of the particular financial institution from the financial institution's server. The bank server then transmits the business rules to the OFC driver which incorporates the business rules into the application program software and reconfigures the application program to operate according to the business rules.

33 Claims, 5 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K00C	Image
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☐ 8. Document ID: US 6018724 A

Entry 8 of 42

File: USPT

Jan 25, 2000

US-PAT-NO: 6018724

DOCUMENT-IDENTIFIER: US 6018724 A

TITLE: Method and apparatus for authenticating on-line transaction data

DATE-ISSUED: January 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Arent; Michael A.	Albany	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Sun Microsystems, Inc.	Palo Alto	CA	N/A	N/A	02

APPL-NO: 8/ 885055

DATE FILED: June 30, 1997

INT-CL: [6] G06F 19/00

US-CL-ISSUED: 705/44; 705/39

US-CL-CURRENT: 705/44; 705/39

FIELD-OF-SEARCH: 705/44, 705/39, 395/186, 380/23

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5796841</u>	August 1998	Cordery et al.	380/55
<u>5815657</u>	September 1998	Williams et al.	395/186
<u>5826245</u>	October 1998	Sandberg-Diment	705/44

ART-UNIT: 275

PRIMARY-EXAMINER: MacDonald; Allen R.

ASSISTANT-EXAMINER: Caudle; Pennv

ATTY-AGENT-FIRM: Hecker & Harriman

ABSTRACT:

The present invention comprises a method and apparatus for authenticating data related to on-line transactions. The invention utilizes a user-customized certification indicator that informs a user as to the success or failure of one or more authentication and/or security protocols implemented on a user communications access device such as a personal computer, a personal digital assistant ("PDA"), an enhanced function telephone, etc. In one or more embodiments, one of the components of the indicator is user defined, and locally stored, reducing the likelihood of interception and counterfeiting. In one or more embodiments, the indicator components include a centrally provided graphic element and a user defined text overlay. When a user initiates an electronic transaction, a background validation process is initiated that implements procedures for determining the authenticity of data related to the transaction, such as the identity of a transaction party. If the validation process determines that the data is authentic, the validation process displays a certification indicator comprising the graphic overlaid with the user defined text-string. In another embodiment, the certification indicator includes one or more multi-media components, such as, for example, an audio component.

8 Claims, 10 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 9. Document ID: US 6014666 A

Entry 9 of 42

File: USPT

Jan 11, 2000

US-PAT-NO: 6014666

DOCUMENT-IDENTIFIER: US 6014666 A

TITLE: Declarative and programmatic access control of component-based server applications using roles

DATE-ISSUED: January 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Helland; Patrick James	Redmond	WA	N/A	N/A
Limprecht; Rodney	Woodinville	WA	N/A	N/A
Al-Ghosein; Mohsen	Issaquah	WA	N/A	N/A
Reed; David R.	Seattle	WA	N/A	N/A
Devlin; William D.	Redmond	WA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 958974

DATE FILED: October 28, 1997

INT-CL: [6] G06F 17/30

US-CL-ISSUED: 707/9; 707/10, 395/701, 395/702, 395/703, 395/704, 395/707, 395/710

US-CL-CURRENT: 707/9; 707/10, 717/1, 717/10, 717/2, 717/3, 717/4, 717/7

FIELD-OF-SEARCH: 707/103, 707/9, 707/10, 395/701, 395/703, 395/704, 395/702, 395/707, 395/710

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5481715</u>	January 1996	Hamilton et al.	395/700
<u>5524238</u>	June 1996	Miller et al.	707/4
<u>5577252</u>	November 1996	Nelson et al.	395/670
<u>5689708</u>	November 1997	Regnier et al.	395/682
<u>5717439</u>	February 1998	Levine et al.	345/353
<u>5778365</u>	July 1998	Nishiyama	707/9
<u>5815665</u>	September 1998	Teper et al.	709/229
<u>5822435</u>	October 1998	Boebert et al.	380/49
<u>5832274</u>	November 1998	Cutler et al.	395/712
<u>5838916</u>	November 1998	Domenikos et al.	395/200.49
<u>5864683</u>	January 1999	Boebert et al.	709/249
<u>5881225</u>	March 1999	Worth	713/200
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 Barkley, "Implementing Role Based Access Control using Object Technology," (1995).
 Tucker (editor), "The Computer Science and Engineering Handbook", chapter 49, pp. 1112-1124 and chapter 91, pp. 1929-1948 (1996).

ART-UNIT: 277

PRIMARY-EXAMINER: Fetting; Anton W.

ASSISTANT-EXAMINER: Corriellus; Jean M.

ATTY-AGENT-FIRM: Klarquist Sparkman Campbell Leigh & Whinston LLP

ABSTRACT:

A programming model for component-based server applications provides declarative and programmatic access control at development without knowledge of the security configuration at deployment. The developer defines the server application access control by defining logical classes of users, called roles. The developer also can declare access privileges of the roles at package, component and interface levels of the server application. At development, the

roles are bound to the particular security configuration of the server computer. The programming model also provides application programming and integration interfaces with which the developer can programmatically define access control of the roles to the server application's processing services.

12 Claims, 19 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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10. Document ID: US 5982891 A

Entry 10 of 42

File: USPT

Nov 9, 1999

US-PAT-NO: 5982891

DOCUMENT-IDENTIFIER: US 5982891 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ginter; Karl L.	Beltsville	MD	N/A	N/A
Shear; Victor H.	Bethesda	MD	N/A	N/A
Spahn; Francis J.	El Cerrito	CA	N/A	N/A
Van Wie; David M.	Sunnyvale	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
InterTrust Technologies Corp.	Sunnyvale	CA	N/A	N/A	02

APPL-NO: 8/ 964333

DATE FILED: November 4, 1997

PARENT-CASE:

This is a continuation of application Ser. No. 08/388,107, filed Feb. 13, 1995, now abandoned.

INT-CL: [6] H04L 9/30

US-CL-ISSUED: 380/4; 380/24, 380/25, 705/26

US-CL-CURRENT: 705/54; 705/26, 713/167

FIELD-OF-SEARCH: 380/4, 380/25, 396/683, 705/26, 300/24

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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3796830	March 1974	Smith	N/A
3798359	March 1974	Feistel	N/A
3798360	March 1974	Feistel	N/A
3798605	March 1974	Feistel	N/A
3806882	April 1974	Clarke	N/A
3829833	August 1974	Freeny, Jr.	N/A
3906448	September 1975	Henriques	N/A
3911397	October 1975	Freeny, Jr.	N/A

<u>3924065</u>	December 1975	Freeny, Jr.	N/A
<u>3931504</u>	January 1976	Jacoby	N/A
<u>3946220</u>	March 1976	Brobeck et al.	N/A
<u>3956615</u>	May 1976	Anderson et al.	N/A
<u>3958081</u>	May 1976	Ehrsam et al.	N/A
<u>3970992</u>	July 1976	Boothroyd et al.	N/A
<u>4048619</u>	September 1977	Forman, Jr. et al.	N/A
<u>4071911</u>	January 1978	Mazur	N/A
<u>4112421</u>	September 1978	Freeny, Jr.	N/A
<u>4120030</u>	October 1978	Johnstone	N/A
<u>4163280</u>	July 1979	Mori et al.	N/A
<u>4168396</u>	September 1979	Best	N/A
<u>4196310</u>	April 1980	Forman et al.	N/A
<u>4200913</u>	April 1980	Kuhar et al.	N/A
<u>4209787</u>	June 1980	Freeny, Jr.	N/A
<u>4217588</u>	August 1980	Freeny, Jr.	N/A
<u>4220991</u>	September 1980	Hamano et al.	N/A
<u>4232193</u>	November 1980	Gerard	N/A
<u>4232317</u>	November 1980	Freeny, Jr.	N/A
<u>4236217</u>	November 1980	Kennedy	N/A
<u>4253157</u>	February 1981	Kirschner et al.	N/A
<u>4262329</u>	April 1981	Bright et al.	N/A
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<u>4270182</u>	May 1981	Asija	N/A
<u>4278837</u>	July 1981	Best	N/A
<u>4305131</u>	December 1981	Best	N/A
<u>4306289</u>	December 1981	Lumley	N/A
<u>4309569</u>	January 1982	Merkle	N/A
<u>4319079</u>	March 1982	Best	N/A
<u>4323921</u>	April 1982	Guillou	N/A
<u>4328544</u>	May 1982	Baldwin et al.	N/A
<u>4337483</u>	June 1982	Guillou	N/A
<u>4361877</u>	November 1982	Dyer et al.	N/A
<u>4375579</u>	March 1983	Davida et al.	N/A
<u>4433207</u>	February 1984	Best	N/A
<u>4434464</u>	February 1984	Suzuki et al.	N/A
<u>4442486</u>	April 1984	Mayer	N/A
<u>4446519</u>	May 1984	Thomas	N/A
<u>4454594</u>	June 1984	Heffron et al.	N/A
<u>4458315</u>	July 1984	Uchenick	N/A
<u>4462076</u>	July 1984	Smith, III	N/A
<u>4462078</u>	July 1984	Ross	N/A
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<u>4471163</u>	September 1984	Donald et al.	N/A
<u>4484217</u>	November 1984	Block et al.	N/A
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<u>4513174</u>	April 1985	Herman	N/A
<u>4528588</u>	July 1985	Lofberg	N/A
<u>4528643</u>	July 1985	Freeny, Jr.	N/A
<u>4553252</u>	November 1985	Egendorf	N/A
<u>4558176</u>	December 1985	Arnold et al.	N/A

<u>4558413</u>	December 1985	Schmidt et al.	N/A
<u>4562306</u>	December 1985	Chou et al.	N/A
<u>4562495</u>	December 1985	Bond et al.	N/A
<u>4577289</u>	March 1986	Comerford et al.	N/A
<u>4584641</u>	April 1986	Guglielmino	N/A
<u>4588991</u>	May 1986	Atalla	N/A
<u>4589064</u>	May 1986	Chiba et al.	N/A
<u>4593353</u>	June 1986	Pickholtz	N/A
<u>4593376</u>	June 1986	Volk	N/A
<u>4595950</u>	June 1986	Lofberg	N/A
<u>4597058</u>	June 1986	Izumi et al.	N/A
<u>4634807</u>	January 1987	Chorley et al.	N/A
<u>4644493</u>	February 1987	Chandra et al.	N/A
<u>4646234</u>	February 1987	Tolman et al.	N/A
<u>4652990</u>	March 1987	Pailen et al.	N/A
<u>4658093</u>	April 1987	Hellman	N/A
<u>4670857</u>	June 1987	Rackman	N/A
<u>4672572</u>	June 1987	Alsberg	N/A
<u>4677434</u>	June 1987	Fascenda	N/A
<u>4680731</u>	July 1987	Izumi et al.	N/A
<u>4683553</u>	July 1987	Mollier	N/A
<u>4685056</u>	August 1987	Barnsdale et al.	N/A
<u>4688169</u>	August 1987	Joshi	N/A
<u>4691350</u>	September 1987	Kleijne et al.	N/A
<u>4696034</u>	September 1987	Wiedemer	N/A
<u>4701846</u>	October 1987	Ikeda et al.	N/A
<u>4712238</u>	December 1987	Gilhousen et al.	N/A
<u>4713753</u>	December 1987	Boebert et al.	N/A
<u>4740890</u>	April 1988	William	N/A
<u>4747139</u>	May 1988	Taaffe	N/A
<u>4757533</u>	July 1988	Allen et al.	N/A
<u>4757534</u>	July 1988	Matyas et al.	N/A
<u>4768087</u>	August 1988	Taub et al.	N/A
<u>4791565</u>	December 1988	Dunham et al.	N/A
<u>4796181</u>	January 1989	Wiedemer	N/A
<u>4799156</u>	January 1989	Shavit et al.	N/A
<u>4807288</u>	February 1989	Ugon et al.	N/A
<u>4817140</u>	March 1989	Chandra et al.	N/A
<u>4823264</u>	April 1989	Deming	N/A
<u>4827508</u>	May 1989	Shear	N/A
<u>4864494</u>	September 1989	Kobus, Jr.	N/A
<u>4868877</u>	September 1989	Fischer	N/A
<u>4903296</u>	February 1990	Chandra et al.	N/A
<u>4924378</u>	May 1990	Hersey et al.	N/A
<u>4930073</u>	May 1990	Cina, Jr.	N/A
<u>4949187</u>	August 1990	Cohen	N/A
<u>4977594</u>	December 1990	Shear	N/A
<u>4999806</u>	March 1991	Chernow et al.	N/A
<u>5001752</u>	March 1991	Fischer	N/A
<u>5005122</u>	April 1991	Griffin et al.	N/A

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ART-UNIT: 277

PRIMARY-EXAMINER: Barron, Jr.; Gilberto

ATTY-AGENT-FIRM: Nixon & Vanderhye P.C.

ABSTRACT:

The present invention provides systems and methods for secure transaction management and electronic rights protection. Electronic appliances such as computers equipped in accordance with the present invention help to ensure that information is accessed and used only in authorized ways, and maintain the integrity, availability, and/or confidentiality of the information. Such electronic appliances provide a distributed virtual distribution environment (VDE) that may enforce a secure chain of handling and control, for example, to control and/or meter or otherwise monitor use of electronically stored or disseminated information. Such a virtual distribution environment may be used to protect rights of various participants in electronic commerce and other electronic or electronic-facilitated transactions. Distributed and other operating systems, environments and architectures, such as, for example, those using tamper-resistant hardware-based processors, may establish security at each node. These techniques may be used to support an all-electronic information distribution, for example, utilizing the "electronic highway."

102 Claims, 153 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 31. Document ID: US 5799087 A

Entry 31 of 42

File: USPT

Aug 25, 1998

US-PAT-NO: 5799087

DOCUMENT-IDENTIFIER: US 5799087 A

TITLE: Electronic-monetary system

DATE-ISSUED: August 25, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

APPL-NO: 8/ 427287

DATE FILED: April 21, 1995

PARENT-CASE:

This application is a continuation-in-part of U.S. application Ser. No. 08/234,461, filed Apr. 28, 1994 now U.S. Pat. No. 5,557,518.

INT-CL: [6] H04L 9/32, G07F 19/00

US-CL-ISSUED: 380/24; 235/379, 705/41, 902/2

US-CL-CURRENT: 705/69; 235/379, 705/41, 902/2

FIELD-OF-SEARCH: 380/24, 402/26, 235/379, 902/2, 705/17, 705/34, 705/41, 705/44

REF-CITED:

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ART-UNIT: 362

PRIMARY-EXAMINER: Barron, Jr.; Gilberto

ATTY-AGENT-FIRM: Morgan & Finnegan, L.L.P.

ABSTRACT:

An electronic-monetary system having (1) banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits and electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for

performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices in off-line transactions; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a clearing bank for balancing the electronic money accounts of the different issuing banks; (6) a data communications network for providing communications services to all components of the system; and (7) a security arrangement for maintaining the integrity of the system, and for detecting counterfeiting and tampering within the system. An embodiment of the invention includes a customer service module which handles lost money claims and links accounts to money modules for providing bank access.

18 Claims, 57 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 32. Document ID: US 5794230 A

Entry 32 of 42

File: USPT

Aug 11, 1998

US-PAT-NO: 5794230

DOCUMENT-IDENTIFIER: US 5794230 A

TITLE: Method and system for creating and searching directories on a server
DATE-ISSUED: August 11, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Horadan; Peter H.	Kirkland	WA	N/A	N/A
Candell; Eric M.	Seattle	WA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 671771

DATE FILED: June 28, 1996

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION This application claims the benefit of U.S. Provisional Application Ser. No. 60/013,482 filed Mar. 15, 1996.

INT-CL: [6] G06F 17/30

US-CL-ISSUED: 707/2; 707/3, 707/102, 707/104, 705/17, 705/41, 235/380, 380/24

US-CL-CURRENT: 707/2; 235/380, 705/17, 705/41, 705/70, 707/102, 707/104, 707/3

FIELD-OF-SEARCH: 380/24, 380/49, 707/102, 707/104, 707/2

REF-CITED:

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 PC Banking and Microsoft Money.
 Chevy Chase Home Banking Signet Online, No Date.

ART-UNIT: 271
 PRIMARY-EXAMINER: Black; Thomas G.
 ASSISTANT-EXAMINER: Alam; Shahid
 ATTY-AGENT-FIRM: Jones & Askew, LLP

ABSTRACT:

In association with a computer system, a method and system for storing and locating information pertaining to a particular financial institution that supports on-line services. Information relating to each financial institution is stored as a separate file on the server. The files on the server are organized in a file structure that includes subdirectories identified by the routing in transit number (RTN) or bank identification number (BIN) of the financial institution. The files relating to each financial institution and the subdirectories on the server are identified by the financial institution's (RTN) or BIN. A file is requested by sending a universal resource locator (URL) to the server. The URL identifies the server and also identifies a file path to the file stored on the server based on the RTN or BIN. The file is located on the server and downloaded to the client computer, where an application program extracts information regarding on-line services of the financial institution.

40 Claims, 7 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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☐ 33. Document ID: US 5774553 A

Entry 33 of 42

File: USPT

Jun 30, 1998

US-PAT-NO: 5774553

DOCUMENT-IDENTIFIER: US 5774553 A

TITLE: Foreign exchange transaction system

DATE-ISSUED: June 30, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank N.A.	New York	NY	N/A	N/A	02

APPL-NO: 8/ 754694
DATE FILED: November 21, 1996

INT-CL: [6] H04L 9/00, H04L 9/30, H04L 9/32, G07F 19/00
US-CL-ISSUED: 380/49; 380/9, 380/23, 380/24, 380/25, 380/30, 235/379, 235/380, 395/235, 395/237, 395/239, 395/241, 395/242, 395/244
US-CL-CURRENT: 705/68; 235/379, 235/380, 380/30, 705/35, 705/37, 705/39, 705/41, 705/42, 705/44, 705/69
FIELD-OF-SEARCH: 380/9, 380/23, 380/24, 380/25, 380/49, 380/50, 380/59, 380/29, 380/30, 235/379, 235/380, 395/201, 395/230, 395/235, 395/239, 395/241, 395/242, 395/243, 395/244, 395/237, 901/1, 901/2, 901/4, 901/5, 901/24, 901/25, 901/26, 901/37, 901/39, 901/41

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5453601</u>	September 1995	Rosen	235/379
<u>5455407</u>	October 1995	Rosen	235/380
<u>5508913</u>	April 1996	Yamamoto et al.	395/237

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
0 421 808 A2	April 1991	EP
0 542 298 A2	May 1993	EP
WO 95/30211	November 1995	WO

ART-UNIT: 222
PRIMARY-EXAMINER: Gregory; Bernarr E.
ATTY-AGENT-FIRM: Morgan & Finnegan LLP

ABSTRACT:

A realtime multilateral foreign exchange settlement system having a computer implemented netting system, a processor-based multilateral settlement coordinator (MSC) having a first money module and a first host application, where the first host application receives debit and credit data from said netting system. A plurality of processor-based multilateral settlement agents (MSAs) each having a second money module and a second host application. A plurality of processor-based counterparty settlement agents (CSAs) each having a third money module and a third host application. The second and third money modules communicate via cryptographically secure sessions. The first money module receives electronic money from the third money modules of net debit CSAs via the second money modules. When all net debit counterparties have paid, the first money module sends the electronic money to the third money modules of net credit CSAs via the second money modules.

23 Claims, 71 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 34. Document ID: US 5649099 A

US-PAT-NO: 5649099

DOCUMENT-IDENTIFIER: US 5649099 A

TITLE: Method for delegating access rights through executable access control program without delegating access rights not in a specification to any intermediary nor comprising server security
 DATE-ISSUED: July 15, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Theimer; Marvin M.	Mountain View	CA	N/A	N/A
Nichols; David A.	Mountain View	CA	N/A	N/A
Terry; Douglas B.	San Carlos	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Xerox Corporation	Stamford	CT	N/A	N/A	02

APPL-NO: 8/ 071649

DATE FILED: June 4, 1993

INT-CL: [6] G06F 13/00

US-CL-ISSUED: 395/187.01; 395/186, 395/200.03, 395/490, 395/491, 395/684

US-CL-CURRENT: 713/201; 709/229, 709/330, 711/163, 711/164, 713/200

FIELD-OF-SEARCH: 395/725, 395/650, 395/600, 395/700, 395/187.01, 395/186, 395/200.03, 395/490, 395/491, 395/684, 380/23, 380/4, 370/60

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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 R. M. Needham et al. "Using Encryption for Authentication in Large Networks of Computers," Communications of the ACM, Dec. 1978, vol. 21, No. 12 pp. 993-999.
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 J. H. Howard et al. "Scale and Performance in a Distributed File System," ACM Transactions on Computer Systems, vol. 6, No. 1, Feb. 1988, pp. 51-81.
 M. Satyanarayanan "Integrating Security in a Large Distributed System," ACM Transactions on Computer Systems, vol. 7, No. 3, Aug. 1989, pp. 247-280.
 Morrie Gasser et al. "An Architecture for Practical Delegation in a Distributed System," CH2884-5/90/0000/0020\$01.00 .COPYRGT. 1990 IEEE pp. 20-30.
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 SunOS.TM. Reference Manual, Sun Microsystems, (excerpts) Comm. Commands, Misc. Ref. Man. Pages, Chapt. 1, 4, 8 and 14.

ART-UNIT: 237

PRIMARY-EXAMINER: Barry, Esq.; Lance Leonard

ASSISTANT-EXAMINER: Luu; Le Hien

ATTY-AGENT-FIRM: Silverman; Alexander E.

ABSTRACT:

A method in which access control programs (ACPs) permit controlled delegation of access rights from clients to untrusted intermediaries. ACPs are programs that encode arbitrary specifications of delegated access rights. In the method, a client creates an ACP and associates it with a request to a server, the request being made through one or more intermediaries. When processing a request received from an intermediary, the server executes the access control program to determine whether or not to grant the request.

36 Claims, 15 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 35. Document ID: US 5455407 A

Entry 35 of 42

File: USPT

Oct 3, 1995

US-PAT-NO: 5455407

DOCUMENT-IDENTIFIER: US 5455407 A

TITLE: Electronic-monetary system

DATE-ISSUED: October 3, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

DISCLAIMER DATE: 20120926

APPL-NO: 8/ 378955

DATE FILED: January 27, 1995

PARENT-CASE:

This is a divisional of co-pending application Ser. No. 07/794,112 filed Nov. 15, 1991.

INT-CL: [6] G06K 5/00

US-CL-ISSUED: 235/380; 235/379, 364/408, 902/24

US-CL-CURRENT: 705/69; 235/379, 705/42, 902/24

FIELD-OF-SEARCH: 235/380, 235/379, 902/24, 364/406

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3573747</u>	April 1971	Adams et al.	N/A
<u>3749887</u>	July 1973	Giuliani	N/A
<u>3852571</u>	December 1974	Hall et al.	N/A
<u>3906460</u>	September 1975	Halpern	N/A
<u>3932730</u>	January 1976	Ambrosio	N/A
<u>3934122</u>	January 1976	Riccitelli	N/A
<u>3937925</u>	February 1976	Boothroyd	N/A
<u>3971916</u>	July 1976	Moreno	N/A
<u>4001550</u>	January 1977	Schatz	N/A
<u>4007355</u>	February 1977	Moreno	N/A
<u>4053735</u>	October 1977	Fondos	N/A
<u>4120452</u>	October 1978	Kimura et al.	N/A
<u>4172552</u>	October 1979	Case	N/A
<u>4179064</u>	December 1979	Yoshioka et al.	N/A
<u>4214230</u>	July 1980	Fak et al.	N/A
<u>4218582</u>	August 1980	Hellman et al.	N/A
<u>4224666</u>	September 1980	Giraud	N/A
<u>4256955</u>	March 1981	Giraud et al.	N/A
<u>4270042</u>	May 1981	Case	N/A
<u>4277837</u>	July 1981	Stuckert	N/A
<u>4302810</u>	November 1981	Bouricius et al.	N/A
<u>4305059</u>	December 1981	Benton	N/A
<u>4320387</u>	March 1982	Powell	N/A
<u>4321672</u>	March 1982	Braun et al.	N/A
<u>4341951</u>	July 1982	Benton	N/A
<u>4404649</u>	September 1983	Nunley et al.	N/A
<u>4405829</u>	September 1983	Rivest et al.	N/A
<u>4442345</u>	April 1984	Mollier et al.	N/A
<u>4443027</u>	April 1984	McNeeley et al.	N/A
<u>4453074</u>	June 1984	Weinstein	N/A
<u>4454414</u>	June 1984	Benton	N/A
<u>4460965</u>	July 1984	Trehn et al.	N/A
<u>4467139</u>	August 1984	Mollier	N/A
<u>4498000</u>	February 1985	Decavele et al.	N/A
<u>4511970</u>	April 1985	Okano et al.	N/A
<u>4523087</u>	June 1985	Benton	N/A
<u>4523297</u>	June 1985	Ugon et al.	N/A
<u>4529870</u>	July 1985	Chaum	N/A
<u>4536647</u>	August 1985	Atalla et al.	N/A
<u>4549075</u>	October 1985	Saada et al.	N/A
<u>4614861</u>	September 1986	Pavlov et al.	N/A

<u>4625276</u>	November 1986	Benton et al.	N/A
<u>4629872</u>	December 1986	Hallberg	N/A
<u>4630201</u>	December 1986	White	N/A
<u>4634845</u>	January 1987	Hale et al.	N/A
<u>4642768</u>	February 1987	Roberts	N/A
<u>4650978</u>	March 1987	Hudson et al.	N/A
<u>4667088</u>	May 1987	Kramer et al.	N/A
<u>4673802</u>	June 1987	Ohmae et al.	N/A
<u>4689478</u>	August 1987	Hale et al.	N/A
<u>4692601</u>	September 1987	Nakano	N/A
<u>4697073</u>	September 1987	Hara	N/A
<u>4705211</u>	November 1987	Honda et al.	N/A
<u>4722055</u>	January 1988	Roberts	N/A
<u>4727243</u>	February 1988	Savar	N/A
<u>4727244</u>	February 1988	Nakano et al.	N/A
<u>4734568</u>	March 1988	Watanabe	N/A
<u>4736094</u>	April 1988	Yoshida	N/A
<u>4742215</u>	May 1988	Daughters et al.	N/A
<u>4748668</u>	May 1988	Shamir et al.	N/A
<u>4750119</u>	June 1988	Cohen et al.	N/A
<u>4751640</u>	June 1988	Lucas et al.	N/A
<u>4752676</u>	June 1988	Leonard et al.	N/A
<u>4752877</u>	June 1988	Roberts et al.	N/A
<u>4757185</u>	July 1988	Onishi	N/A
<u>4759064</u>	July 1988	Chaum	N/A
<u>4766539</u>	August 1988	Fox	N/A
<u>4767920</u>	August 1988	Kitta et al.	N/A
<u>4799156</u>	January 1989	Shavit et al.	N/A
<u>4823264</u>	April 1989	Deming	N/A
<u>4825052</u>	April 1989	Chemin et al.	N/A
<u>4827112</u>	May 1989	Yoshino et al.	N/A
<u>4837422</u>	June 1989	Dethloff et al.	N/A
<u>4839504</u>	June 1989	Nakano	N/A
<u>4877947</u>	October 1989	Mori	N/A
<u>4879747</u>	November 1989	Leighton et al.	N/A
<u>4906828</u>	March 1990	Halpern	N/A
<u>4914698</u>	April 1990	Chaum	N/A
<u>4926480</u>	May 1990	Chaum	N/A
<u>4949380</u>	August 1990	Chaum	N/A
<u>4962530</u>	October 1990	Cairns	N/A
<u>4964164</u>	October 1990	Fiat	N/A
<u>4968873</u>	November 1990	Dethloff et al.	N/A
<u>4973828</u>	November 1990	Naruse et al.	N/A
<u>4977595</u>	December 1990	Ohta et al.	N/A
<u>4985833</u>	January 1991	Oncken	N/A
<u>4987593</u>	January 1991	Chaum	N/A
<u>4991210</u>	February 1991	Chaum	N/A
<u>4992646</u>	February 1991	Collin	N/A
<u>4995081</u>	February 1991	Leighton et al.	N/A
<u>4996711</u>	February 1991	Chaum	N/A
<u>5191193</u>	March 1993	LeRoux	N/A

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
172670A2	February 1986	EP
391261B1	March 1990	EP
421808A3	April 1991	EP
8303018	September 1983	WO
91106691	October 1991	WO
9308545	April 1993	WO

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Untraceable Electronic Cash, D. Chaum, et al. month and year missing.
Thomas M. Atwood, The case for object-oriented databases, IEEE Spectrum, Feb. 1991.
David Chaum, Online Cash Checks, Centre for Mathematics and Computer Science, Amsterdam month and year missing.

ART-UNIT: 254

PRIMARY-EXAMINER: Shepperd; John

ASSISTANT-EXAMINER: Lee; Michael G.

ATTY-AGENT-FIRM: Dowling; Thomas P. Bromberg; Laurence J.

ABSTRACT:

An improved monetary system using electronic media to exchange economic value securely and reliably. The invention provides a complete monetary system having electronic money that is interchangeable with conventional paper money comprising (1) issuing banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits, or electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a security arrangement for maintaining the integrity of

the system; and (6) reconciliation and clearing processes to monitor and balance the monetary system.

9 Claims, 69 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 36. Document ID: US 5453601 A

Entry 36 of 42

File: USPT

Sep 26, 1995

US-PAT-NO: 5453601

DOCUMENT-IDENTIFIER: US 5453601 A

TITLE: Electronic-monetary system

DATE-ISSUED: September 26, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

APPL-NO: 7/ 794112

DATE FILED: November 15, 1991

INT-CL: [6] G06F 17/60, G06G 7/52

US-CL-ISSUED: 235/379; 364/408, 902/24

US-CL-CURRENT: 705/65; 235/379, 705/43, 705/67, 705/68, 705/69, 713/173, 902/24

FIELD-OF-SEARCH: 235/379, 364/406, 364/408, 902/24

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3573747</u>	April 1971	Adams	N/A
<u>3749887</u>	July 1973	Giuliani	N/A
<u>3852571</u>	December 1974	Hall et al.	N/A
<u>3906460</u>	September 1975	Halpern	N/A
<u>3932730</u>	February 1976	Ambrosio	N/A
<u>3934122</u>	January 1976	Riccitelli	N/A
<u>3937925</u>	February 1976	Boothroyd	N/A
<u>4001550</u>	January 1977	Schatz	N/A
<u>4007355</u>	February 1977	Moreno	N/A
<u>4053735</u>	October 1977	Foados	N/A
<u>4120452</u>	October 1978	Kimura et al.	N/A
<u>4172552</u>	October 1979	Case et al.	N/A
<u>4179064</u>	December 1979	Yoshioka et al.	N/A
<u>4214230</u>	July 1980	Fak et al.	N/A
<u>4218582</u>	August 1980	Hellman et al.	N/A
<u>4224666</u>	September 1980	Giraud	N/A
<u>4256955</u>	March 1981	Giraud et al.	N/A

<u>4270042</u>	May 1981	Case	N/A
<u>4277837</u>	July 1981	Stuckert	N/A
<u>4302810</u>	November 1981	Bouricius et al.	N/A
<u>4305059</u>	December 1981	Benton	N/A
<u>4320387</u>	March 1982	Powell	N/A
<u>4321672</u>	March 1982	Braun et al.	N/A
<u>4341951</u>	July 1982	Benton	N/A
<u>4404649</u>	September 1983	Nunley et al.	N/A
<u>4405829</u>	September 1983	Rivest et al.	N/A
<u>4442345</u>	April 1984	Mollier et al.	N/A
<u>4443027</u>	April 1984	McNeely et al.	N/A
<u>4453074</u>	June 1984	Weinstein	N/A
<u>4454414</u>	June 1984	Benton	N/A
<u>4460965</u>	July 1984	Trehn et al.	N/A
<u>4467139</u>	August 1984	Mollier	N/A
<u>4498000</u>	February 1985	Decavele et al.	N/A
<u>4511970</u>	April 1985	Okano et al.	N/A
<u>4523087</u>	June 1985	Benton	N/A
<u>4523297</u>	June 1985	Ugon et al.	N/A
<u>4529870</u>	July 1985	Chaum	N/A
<u>4536647</u>	August 1985	Atalla et al.	N/A
<u>4549075</u>	October 1985	Saada et al.	N/A
<u>4597046</u>	June 1986	Musmanno et al.	N/A
<u>4614861</u>	September 1986	Pavlov et al.	N/A
<u>4625276</u>	November 1986	Benton et al.	N/A
<u>4629872</u>	December 1986	Hallberg	N/A
<u>4630201</u>	December 1986	White	N/A
<u>4634845</u>	January 1987	Hale et al.	N/A
<u>4642768</u>	February 1987	Roberts	N/A
<u>4650978</u>	March 1987	Hudson et al.	N/A
<u>4673802</u>	June 1987	Ohmae et al.	N/A
<u>4677088</u>	May 1987	Kramer et al.	N/A
<u>4689478</u>	August 1987	Hale et al.	N/A
<u>4692601</u>	September 1987	Nakano	N/A
<u>4697073</u>	September 1987	Hara	N/A
<u>4705211</u>	November 1987	Honda et al.	N/A
<u>4722055</u>	January 1988	Roberts	N/A
<u>4727243</u>	February 1988	Savar	N/A
<u>4727244</u>	February 1988	Nakano et al.	N/A
<u>4734568</u>	March 1988	Watanabe	N/A
<u>4736094</u>	April 1988	Yoshida	N/A
<u>4742215</u>	May 1988	Daughters et al.	N/A
<u>4748668</u>	May 1988	Shamir et al.	N/A
<u>4750119</u>	June 1988	Cohen et al.	N/A
<u>4751640</u>	June 1988	Lucas et al.	N/A
<u>4752676</u>	June 1988	Leonard et al.	N/A
<u>4752877</u>	June 1988	Roberts et al.	N/A
<u>4757185</u>	July 1988	Onishi	N/A
<u>4759064</u>	July 1988	Chaum	N/A
<u>4766539</u>	August 1988	Fox	N/A
<u>4767920</u>	August 1988	Kitta et al.	N/A

<u>4799156</u>	January 1989	Shavit et al.	N/A
<u>4823264</u>	April 1989	Deming	N/A
<u>4825052</u>	April 1989	Chemin et al.	N/A
<u>4827112</u>	May 1989	Yoshino et al.	N/A
<u>4837422</u>	June 1989	Dethloff et al.	N/A
<u>4877947</u>	October 1989	Mori	N/A
<u>4879747</u>	November 1989	Leighton et al.	N/A
<u>4906828</u>	March 1990	Halpern	N/A
<u>4914698</u>	April 1990	Chaum	N/A
<u>4949380</u>	August 1990	Chaum	N/A
<u>4962530</u>	October 1990	Cairns	N/A
<u>4964164</u>	October 1990	Fiat	N/A
<u>4968873</u>	November 1990	Dethloff et al.	N/A
<u>4977595</u>	December 1990	Ohta et al.	N/A
<u>4985833</u>	January 1991	Oncken	N/A
<u>4987593</u>	January 1991	Chaum	N/A
<u>4991210</u>	February 1991	Chaum	N/A
<u>4992646</u>	February 1991	Collin	N/A
<u>4995081</u>	February 1991	Leighton et al.	N/A
<u>4996711</u>	February 1991	Chaum	N/A

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
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WO9116691	October 1991	WO
WO9308545	April 1993	WO

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David Chaum, Online Cash Checks, Centre for Mathematics and Computer Science, Amsterdam.

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O'Reilly, Ireland's Pocket Revolution: The Micro That Replaces Cash, Cheques, And Cards, Retail Banker International, Feb. 20, 1984, at 4.

Nakamoto, Japanese Take To The Top The Prepaid Plastic Card Business, Financial Times, Nov. 11, 1988, at 7.

Rowe, Au Revoir Le Cash?, Banking Technology, Jul.-Aug. 1991, at 46.

Okamoto and Ohta, Universal Electronic Cash, Cryptography Symposium (1991).

ART-UNIT: 255

PRIMARY-EXAMINER: Willis; Davis L.

ASSISTANT-EXAMINER: Rashid; Peter J.

ATTY-AGENT-FIRM: Dowling; Thomas P. Bromberg; Laurence J.

ABSTRACT:

An improved monetary system using electronic media to exchange economic value securely and reliably. The invention provides a complete monetary system having electronic money that is interchangeable with conventional paper money comprising (1) issuing banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits, or electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a security arrangement for maintaining the integrity of the system; and (6) reconciliation and clearing processes to monitor and balance the monetary system.

98 Claims, 69 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWMC	Image
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☐ 37. Document ID: US 4375097 A

Entry 37 of 42

File: USPT

Feb 22, 1983

US-PAT-NO: 4375097

DOCUMENT-IDENTIFIER: US 4375097 A

TITLE: Transparent intelligent network for data and voice

DATE-ISSUED: February 22, 1983

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ulug; Mehmet E.	Ottawa	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Texas Instruments Incorporated	Dallas	TX	N/A	N/A	02

APPL-NO: 6/ 150265

DATE FILED: May 15, 1980

PARENT-CASE:

This is a continuation of application Ser. No. 912,114 filed June 2, 1978 now abandoned.

INT-CL: [3] H04J 6/00

US-CL-ISSUED: 370/94

US-CL-CURRENT: 370/400; 370/474, 370/538

FIELD-OF-SEARCH: 370/93, 370/80, 370/84, 370/88, 370/89, 370/99, 370/60, 370/61, 370/83, 370/94, 370/92, 370/91, 370/100, 370/112, 370/43, 370/81, 370/16

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3387086</u>	June 1968	Beresin	370/43
<u>3641273</u>	February 1972	Herold	370/80
<u>3721767</u>	March 1973	La Marche	370/81
<u>3749845</u>	July 1973	Fraser	370/80
<u>3829777</u>	August 1974	Muratani	370/16
<u>3927268</u>	December 1975	Sciulli	370/80
<u>3934224</u>	January 1976	Dulaney	N/A
<u>3988545</u>	October 1976	Kuemmerle	370/60
<u>4009345</u>	February 1977	Flemming	370/93
<u>4074232</u>	February 1978	Otomo	370/60
<u>4093823</u>	June 1978	Chu	370/80
<u>4096355</u>	June 1978	Rothauser	370/93

ART-UNIT: 234

PRIMARY-EXAMINER: Robinson; Thomas A.

ATTY-AGENT-FIRM: Devine; Thomas G. Merrett; Rhys Sharp; Mel

ABSTRACT:

A transparent intelligent communication network having nodes and communication links between the nodes and providing improved system input features by including the sampling of customer inputs at different rates according to their output rates of data at the exit node or at faster rates if there is a spare channel capacity available.

14 Claims, 20 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMCC	Image
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☐ 38. Document ID: US 4334306 A

Entry 38 of 42

File: USPT

Jun 8, 1982

US-PAT-NO: 4334306

DOCUMENT-IDENTIFIER: US 4334306 A

TITLE: Transparent intelligent network for data and voice

DATE-ISSUED: June 8, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ulug; Mehmet E.	Ottawa	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Texas Instruments Incorporated	Dallas	TX	N/A	N/A	02

APPL-NO: 6/ 150033

DATE FILED: May 15, 1980

PARENT-CASE:

This is a continuation, of application Ser. No. 912,118, filed June 2, 1978 now abandoned.

INT-CL: [3] H04J 6/00

US-CL-ISSUED: 370/94

US-CL-CURRENT: 370/316; 370/235, 370/349, 370/407

FIELD-OF-SEARCH: 370/93, 370/80, 370/84, 370/88, 370/89, 370/99, 370/60, 370/61, 370/83, 370/94, 370/92, 370/91, 370/100, 370/112, 370/43, 370/81, 370/16

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
3387086	June 1968	Beresin	370/43
3641273	February 1972	Herold	370/80
3721767	March 1973	La Marche	370/81
3749845	July 1973	Fraser	370/80
3829777	August 1974	Muratani	370/16
3927268	December 1975	Sciulli	370/80
3934224	January 1976	Dulaney	N/A
3979719	September 1976	Tooley	N/A
3988545	October 1976	Kuemmerle	370/60
4009345	February 1977	Flemming	370/93
4074232	February 1978	Otomo	370/60
4093823	June 1978	Chu	370/80
4096355	June 1978	Rothauser	370/93

ART-UNIT: 234

PRIMARY-EXAMINER: Robinson; Thomas A.

ATTY-AGENT-FIRM: Devine; Thomas G. Merrett; Rhys Sharp; Mel

ABSTRACT:

A transparent intelligent communication network having both terrestrial and satellite links between nodes and providing improved accuracy and speed in transmission by distinguishing between data requiring rapid receipt at the receiving node and other data, and dispatching data accordingly, while transmitting system protocol and error-correcting information (e.g., retransmissions) over terrestrial links.

10 Claims, 20 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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☐ 39. Document ID: US 4317196 A

Entry 39 of 42

File: USPT

Feb 23, 1982

US-PAT-NO: 4317196

DOCUMENT-IDENTIFIER: US 4317196 A

TITLE: Transparent intelligent network for data and voice

DATE-ISSUED: February 23, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ulug; Mehmet E.	Ottawa	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Texas Instruments Incorporated	Dallas	TX	N/A	N/A	02

APPL-NO: 6/ 149826

DATE FILED: May 15, 1980

PARENT-CASE:

This is a continuation of application Ser. No. 912,115, filed June 2, 1978, abandoned.

INT-CL: [3] H04J 6/00

US-CL-ISSUED: 370/94

US-CL-CURRENT: 370/391; 370/316, 370/412, 370/493

FIELD-OF-SEARCH: 340/146.1BA, 340/146.1BE, 370/93, 370/80, 370/84, 370/88, 370/89, 370/99, 370/60, 370/61, 370/83, 370/94, 370/92, 370/91, 370/100, 370/112, 370/43, 370/81, 370/16

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3387086</u>	June 1968	Beresin	370/43
<u>3641273</u>	February 1972	Herold	370/80
<u>3721767</u>	March 1973	LaMarche	370/81
<u>3749845</u>	July 1973	Fraser	370/80
<u>3829777</u>	August 1974	Muratani	370/16
<u>3927268</u>	December 1975	Sciulli	370/80
<u>3934224</u>	January 1976	Dulaney	N/A
<u>3988545</u>	October 1976	Kuemmerle	370/60
<u>4009345</u>	February 1977	Flemming	370/93
<u>4074232</u>	February 1978	Otomo	370/60
<u>4093823</u>	June 1978	Chu	370/80
<u>4096355</u>	June 1978	Rothauser	370/93

ART-UNIT: 234

PRIMARY-EXAMINER: Robinson; Thomas A.

ATTY-AGENT-FIRM: Devine; Thomas G. Sharp; Melvin Merrett; Rhys

ABSTRACT:

A transparent intelligent communication network characterized by the rythmic storage and forwarding of multi-user packets comprised of mini-packets of customer data, wherein interconnection bandwidth is dynamically expanded when normal currently received information is insufficient to occupy all available bandwidth, thereby reducing backlogs of stored information and increasing efficiency of use of channel capacity.

10 Claims, 21 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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☐ 40. Document ID: US 4317197 A

Entry 40 of 42

File: USPT

Feb 23, 1982

US-PAT-NO: 4317197

DOCUMENT-IDENTIFIER: US 4317197 A

TITLE: Transparent intelligent network for data and voice
DATE-ISSUED: February 23, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ulug; Mehmet E.	Ottawa	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Texas Instruments Incorporated	Dallas	TX	N/A	N/A	02

APPL-NO: 6/ 150263

DATE FILED: May 15, 1980

PARENT-CASE:

This is a continuation, of application Ser. No. 912,117, filed June 2, 1978, abandoned.

INT-CL: [3] H04J 6/00

US-CL-ISSUED: 370/94

US-CL-CURRENT: 370/235; 370/316, 370/349, 370/407, 370/412, 370/493

FIELD-OF-SEARCH: 340/146.1BA, 340/146.1BE, 370/93, 370/80, 370/84, 370/88,
370/89, 370/99, 370/60, 370/61, 370/83, 370/94, 370/92, 370/91, 370/100,
370/112, 370/43, 370/81, 370/16

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3387086</u>	June 1968	Beresin	370/43
<u>3641273</u>	February 1972	Herold	370/80
<u>3721767</u>	March 1973	LaMarche	370/81
<u>3749845</u>	July 1973	Fraser	370/80
<u>3829777</u>	August 1974	Muratani	370/16
<u>3927268</u>	December 1975	Sciulli	370/80
<u>3934224</u>	January 1976	Dulaney	N/A
<u>3988545</u>	October 1976	Kuemmerle	370/60
<u>4009345</u>	February 1977	Flemming	370/93
<u>4074232</u>	February 1978	Otomo	370/60
<u>4093823</u>	June 1978	Chu	370/80
<u>4096355</u>	June 1978	Rothauser	370/93

ART-UNIT: 234

PRIMARY-EXAMINER: Robinson; Thomas A.

ATTY-AGENT-FIRM: Devine; Thomas G. Sharp; Melvin Merrett; Rhys

ABSTRACT:

A transparent intelligent communication network having both terrestrial and satellite links between nodes and providing improved channel utilization by including a system of reservations through successive links for the incoming data.

17 Claims, 21 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K00C	Image
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☐ 41. Document ID: US 4316283 A

Entry 41 of 42

File: USPT

Feb 16, 1982

US-PAT-NO: 4316283

DOCUMENT-IDENTIFIER: US 4316283 A

TITLE: Transparent intelligent network for data and voice

DATE-ISSUED: February 16, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ulug; Mehmet E.	Ottawa	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Texas Instruments Incorporated	Dallas	TX	N/A	N/A	02

APPL-NO: 6/ 139914

DATE FILED: April 14, 1980

PARENT-CASE:

This is a continuation of application Ser. No. 912,116, filed June 2, 1978, abandoned.

INT-CL: [3] H04J 6/00

US-CL-ISSUED: 370/94

US-CL-CURRENT: 370/449

FIELD-OF-SEARCH: 340/146.1, 340/146.1BA, 340/146.1BE, 370/93, 370/80, 370/84, 370/88, 370/89, 370/99, 370/60, 370/61, 370/83, 370/94, 370/92, 370/91, 370/112, 370/100, 370/43, 370/81, 370/16

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3387086</u>	June 1968	Beresin	370/43
<u>3641273</u>	February 1972	Herold	370/80
<u>3721767</u>	March 1973	La Marche	370/81
<u>3749845</u>	July 1973	Fraser	370/80
<u>3829777</u>	August 1974	Muratani	N/A
<u>3927268</u>	December 1975	Sciulli	370/80
<u>3934224</u>	January 1976	Dulaney	340/146.1BA
<u>3988545</u>	October 1976	Kuemmerle	370/60
<u>4009345</u>	February 1977	Flemming	370/93
<u>4074232</u>	February 1978	Otomo	370/60
<u>4093823</u>	June 1978	Chu	370/80
<u>4096355</u>	June 1978	Rothauser	370/93

ART-UNIT: 234

PRIMARY-EXAMINER: Robinson; Thomas A.

ATTY-AGENT-FIRM: Devine; Thomas G. Sharp; Melvin Merrett; Rhys

ABSTRACT:

A transparent intelligent communication network with improved capability for handling data independent of customer protocol. In a situation where connection is made to an X-25 computer and to a polled line, the network strips off the user protocol and only transmits that part of the information which represents usable data to the polled line. When the transmission is received back from the output port, appropriate protocol is reinserted, and it therefore appears to the external connections as if they are directly connected to each other.

8 Claims, 21 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Image
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☐ 42. Document ID: US 4312065 A

Entry 42 of 42

File: USPT

Jan 19, 1982

US-PAT-NO: 4312065

DOCUMENT-IDENTIFIER: US 4312065 A

TITLE: Transparent intelligent network for data and voice

DATE-ISSUED: January 19, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ulug; Mehmet E.	Ottawa	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Texas Instruments Incorporated	Dallas	TX	N/A	N/A	02

APPL-NO: 6/ 150264

DATE FILED: May 15, 1980

PARENT-CASE:

This is a continuation of application Ser. No. 912,160 filed June 2, 1978 now abandoned.

INT-CL: [3] H04J 6/00

US-CL-ISSUED: 370/94

US-CL-CURRENT: 370/230; 370/252, 370/412

FIELD-OF-SEARCH: 340/146.1BA, 340/146.1BE, 340/371, 370/93, 370/80, 370/84, 370/88, 370/89, 370/99, 370/60, 370/61, 370/83, 370/94, 370/92, 370/91, 370/100, 370/112, 370/43, 370/81, 370/16

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3387086</u>	June 1968	Beresin	370/43
<u>3641273</u>	February 1972	Herold	370/80
<u>3721767</u>	March 1973	LaMarche	370/81
<u>3749845</u>	July 1973	Fraser	370/80
<u>3829777</u>	August 1974	Muratani	370/16
<u>3927268</u>	December 1975	Sciulli	370/80
<u>3934224</u>	January 1976	Dulaney	N/A
<u>3988545</u>	October 1976	Kuemmerle	370/60
<u>4009345</u>	February 1977	Flemming	370/93
<u>4074232</u>	February 1978	Otomo	370/60
<u>4093823</u>	June 1978	Chu	370/80
<u>4096355</u>	June 1978	Rothauser	370/93

ART-UNIT: 234

PRIMARY-EXAMINER: Robinson; Thomas A.

ATTY-AGENT-FIRM: Devine; Thomas G.

ABSTRACT:

A transparent intelligent communication network having a plurality of nodes and communications paths linking the nodes, wherein reduction in delays for customers wishing to enter the network is achieved by providing a selective first in-first out service for customer's initial signals according to available channel capacity, and providing first in-first out service for customer's backlog.

7 Claims, 21 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RWIC	Image
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01856258 Supplier Number: 43183087 (THIS IS THE FULLTEXT)

Citicorp Selects Empress Software Inc. To Develop Foreign Language Support for ATMs.

Bank Automation News, v4, n15, pN/A

July 29, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 120

TEXT:

Greenbelt, Md.-based Empress Software Inc. is going to help develop foreign language support for its Automation Teller Machine (ATM) screens worldwide. The Empress database is being used to store pre-translated ATM words and phrases plus information which then translate into colored text and graphic objects. This will reduce the time and cost of what had previously been customer data entry effort for each additional language. Because the phraseology is basically the same for ATM transactions worldwide, Citicorp designers can now identify any needed term in English and then call up the appropriate language, which gets automatically substituted for the English phrase on the screen. (Cathi Fradin, press liaison, Empress Software Inc., 301/231-9393)

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PUBLISHER NAME: Phillips Business Information, Inc.

INDUSTRY NAMES: BANK (Banking, Finance and Accounting); BUSN (Any type of business); CMPT (Computers and Office Automation)

The MasterCard International/Cirrus global ATM network

CardFAX, pN/A

Sept 12, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 66

TEXT:

CLOUDS AHEAD: The MasterCard International/Cirrus global ATM network has rolled out a marketing program for airport ATMs. The Travelers Access program features illuminated signs in airports directing cardholders to Cirrus ATMs in different languages. Also, MasterCard will publish a directory listing airports with Cirrus ATMs. Bank of Montreal, Argentina-based Argencard and Taiwan-based ICBC are initial participants in the program.

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PUBLISHER NAME: Faulkner & Gray, Inc.

INDUSTRY NAMES: BUSN (Any type of business); TRAN (Transportation, Distribution and Purchasing)

?

537152 Supplier Number: 45114090 (THIS IS THE FULLTEXT)

IBM's PHONE BANKING SOLUTION FOR HONG KONG & SHANGHAI CORPORATION

M2 Presswire, pN/A

Nov 3, 1994

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 246

TEXT:

M2 PRESSWIRE-3 November 1994-IBM's PHONE BANKING SOLUTION FOR HONG KONG & SHANGHAI CORPORATION (C)1994 M2 COMMUNICATIONS LTD

RDATE: 121094

The Hongkong and Shanghai Banking Corporation Limited is implementing an IBM phone banking solution for its group operations worldwide.

Personal Phone Banking Services and Automated Phone Banking Services are provided by an IBM DirectTalk/2 based application system on an IBM Personal Systems/2 computer. Using an IBM AS/400 server, various transactional services such as fund transfer, credit card payment and deposits, can be provided over the phone. Enquiries on exchange rates and deposit balances are available 24-hours a day.

'Hong Kong Bank looked at other systems but decided that the rich functionality and versatility of IBM CallPath DirectTalk/2 would be the best platform for its phone banking system,' said Mr. Eric Lau, IBM Hong Kong's associate systems engineer.

'DirectTalk/2 features like multiple language support, enables the bank to introduce their. phone banking system with ease in countries where requirements for local language support is of particular importance.'

More than ten countries in Asia, the Middle-East and Europe will have the system installed by the end of this year.

Hong Kong Bank plans to integrate the use of other advanced applications, including fax support and cryptography and add more countries to the system in 1995.

CONTACT: Paul Reilly

Tel: +44 962 816529

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PUBLISHER NAME: M2 Communications

INDUSTRY NAMES: BUSN (Any type of business); INTL (Business, International)

03844215 Supplier Number: 45503834 (THIS IS THE FULLTEXT)

ISLANDS IN THE STREAM: In selling financial services to largely untapped ethnic and other minority markets, cultural nuances are critical

Forecast, p39

May, 1995

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 4222

TEXT:

By Jay Stuller

FOR A PEOPLE WHO ENDURED A KILLING FIELDS OF TRAGEDY, RESILIENT CAMBODIAN refugees have rolled into American society with remarkable success. Hard-working and entrepreneurial, these immi-grants carved out one particular niche: Controlling more than 80 percent of California's 3,200 or so donut shops, the individual Cambodian businessmen and women seem destined to move on to other states, wresting market share from the most organized of donut chains.

And yet, the Cambodians founded the profitable little enterprises without the help of bank loans.

Following a practice the Chinese call hui and the Koreans term kye, the Cambodians borrow start-up funds from relatives or a circle of friends. Even without an American credit history, they acquire loans that typically range from \$53,000 to \$50,000. While the pressure to make all interest and principal payments is intense--failure means the risk of losing face before family and community--the system works. But it also delays these immigrants' acculturation, for a time holding them apart from conventional financial service providers.

"A newcomer, especially one from rural Asia, faces many intimidating new experiences," explains Angela Chin, a Bank of America vice president of retail marketing. "That's why many turn to those community arrangements, which are comfortable and familiar." Many immigrant Asians and Hispanics come from nations that don't have Social Security, unemployment benefits or other governmental social safety nets.

Operating Without a Safety Net

"A few think the U.S. government will help them," says Chin, "but most come from regions where family and community provided that support." Either way, these immigrants arrive with the need and the desire to build some financial security.

Jay Stuller.Stuller

"To build a new life in the U.S.." adds Chin, "They eventually have to establish credit, get a checking account and learn to trust that an ATM will not only give you money, but safely take a deposit. Whether it's a sophisticated Hong Kong businessman or a farmer from Viet Nam, these immigrants are looking for an institution they can trust, and which employs people who speak their language."

Yet, until recently, most of the nation's financial services industry has not gone looking for business in ethnic and other minority segments. Relatively few banks, brokerages, insurance companies and financial advisors tailored their marketing and support staff to serve such customers. Despite its \$16 trillion in assets and 5 million employees, the industry lags behind consumer products companies in the ways of segmented marketing.

However, for those who learn the various languages and the nuances and needs of minority cultures--be it Asians, Hispanics, African-Americans, or those of Middle Eastern origin--the opportunities are vast.

"It's a simple fact that there are 7.3 million Asians in the U.S., and it's the fastest-growing population segment in the nation," says Chin. "While the Caucasian population in California grew 13.8 percent from 1980 to 1990, the number of Asians increased by 127 percent." Some come from rural Cambodia or Viet Nam, while others arrive from prosperous Hong Kong, Seoul, Taipei and Singapore. Asians have a median family income that in 1990 was \$42,240--easily outstripping the white family median of \$36,910.

Hispanic Clients--But Which Ones?

The much large Hispanic market is much more amorphous. It includes highly acculturated Mexican-Americans, new arrivals from South America, well-established Cubans, Puerto Ricans and more. But taken as a whole, Hispanics are sorely under-represented in the use of financial services.

According to Coral Gables, Florida-based Market Segment Research & Consulting, only 48 percent of Hispanics have some type of bank account, as opposed to 75 percent of the general market. Low income levels is one reason and so is a preference for dealing with cash, which is tangible and can be seen, rather than credit cards and checks, which don't appear to be as real as currency. But in its 1994 Ethnic Market Report a survey of 5,000 Anglos, African-Americans, Asians and Hispanics, the company found that "as the level of acculturation increases, so does the incidence of checking and savings accounts," explains Herb Levin, Market Segment's director of client services. "But financial account ownership is extremely low among this groups." Indeed, while 10 percent of American financial services consumers use a stock broker service, only 1 out of 100 Hispanics hold brokerage accounts.

Outright poverty keeps many out of the financial services world, but that's not the only reason minorities don't marketers have to really understand a cultural mindset to attract and keep new clients.

Ironically, despite the hui and kye loans acquired by new immigrants, acculturated Asians are solid bank patrons. According to Market Segment Research, 82 percent of Asians have at least one type of bank account, versus 75 percent of the general market. But only 13 percent of Asians had accounts with savings and loan companies, as opposed to nearly a third of the general market. Just 6 percent of the Asian population used stockbrokers, and less than 3 percent invested in mutual or money market funds.

Given the collective resources in these markets, the potential for financial services companies is clear--if only for those that can crack the cultural codes.

The Cultural Imperative

As marlene L. Rossman explains in her book, Multicultural Marketing--Selling to a Diverse America (American management Association, 1994, \$22.95), culture gives individuals an identity and "is learned, shared and passed on from one generation to the next by families, by religious institutions, by schools and governments." The president of Rossman, Graham Associates, a Manhattan-based sales and marketing consulting firm, and an adjunct professor of marketing at Pace University Schools of Business, Rossman notes that mainstream American culture has its own distinct characteristics. Stressing the primacy of the individual, Americans also prize informality in relationships and direct communication. They also like change for change's sake, including anything "new and improved."

But other cultures, Rossman warns "may be rooted in totally opposite beliefs and behaviors." To successfully market any product or service, then, requires an understanding of the differences.

"What you must first recognize is that there aren't any great secrets or different attitudes toward money among Asians and Hispanics," says Wallace Louie, the director of Charles Schwab's Asia pacific Center, which employs Cantonese- and Mandarin- speaking representatives to serve the discount brokerage firm's worldwide Asian clientele. "They're not that different from mainstream Americans, and Abraham Maslow's "hierarchy of needs" applies across all cultures. (A Brooklynborn psychological theorist, Maslow described a series of needs, such as food and shelter, that must be met before humans seek, in ascending order, safety, love and belonging, esteem and finally self-actualization. Financial security probably falls in the safety category.)

"However, we made sure that we avoided using the number 4 in our 800 toll-free line," adds Louie. "In Chinese, the word for 4 sounds very much like 'death.' You wouldn't want that associated with your investments, even if you weren't superstitious. And we have 6's and 8's in our toll-free number, which Chinese consider lucky. Again, it's not a gimmick or big deal. It just reflects a knowledge of our customers."

Newer Isn't Always Better

Louie, whose parents were born in China, says that Schwab has developed a strong Asian clientele--comprising only 1 percent of its 3 million investment accounts and \$130 billion in assets, Asian account for an astonishing 5 percent of Schwab's profits--mainly because the company sells itself as a huge and well-established business. "These immigrants," says Louie, "are wary of small or new financial institutions."

Moreover, as Rossman points out in Multicultural Marketing, many AsianAmericans also feel that "older is better." This is yet another facet of a culture in which the elderly, she writes, are "revered for their knowledge

and experience and are respected far more than younger people." Thus, positioning a product or service as "new and improved" isn't the best sell to an Asian consumer. But that doesn't mean Asians are stodgy about finances.

"In general, Asian investors tend to be a little more speculative and risktaking than, say, Hispanics," explains Louie. "Also, in general, Hispanics are more conservative than mainstream investors. But within all of the populations you've got plenty of individuals who are totally different from their cultural type."

There are some major differences between mainstream U.S. and minority cultures that can influence the marketing of financial services. Rossman cites the studies of Dr. Edward Hall, the noted anthropologist and business consultant, who in the 1960s developed descriptions of "low-context" and "high context" cultures. Mainstream America is low-context culture, in which communication is explicit and dependent on spoken and written words. In contrast, Asians and Hispanics come from high-context cultures, in which status, body language, relationships, tone of voice and other non-verbal elements communicate essential meaning.

Mainstream Americans view non-verbal signals in quite different ways than, say, Asians. "Adult Americans regard someone who doesn't look them in the eye as shifty or untrustworthy," writes Rossman, "but most Asians think that looking someone in the eye is rude or confrontational." When marketing a service to Asians, then, the oblique approach is far better than the aggressive hard sell.

Again, while there's no monolithic Hispanic market, the culture does have one archetype: even with second- and third-generation Hispanic-Americans, family takes precedence over individualism. An ad that shows a single woman living well and independently thanks to her investments--marvelously appealing to mainstream American women--may fall flat with Hispanics. That woman should be living well, but with a husband, a couple of kids, and the grandparents nearby.

Understanding cultural nuances and marketing financial programs with brochures and advertisements in the target audience's language is a necessity. But it's only a start, and a small one at that. "If you advertise and just sit back, you'll get nowhere," says Howard Dade, a Charles Schwab director of international marketing. "For one thing, you'd better employ people from those ethnic groups, who speak the language and know all the cultural subtleties. For another, you've also got to get people out into the community, doing legwork and meeting people. For Hispanics and Asians, personal relationships in the financial world are way more important than for most mainstream Americans."

Indeed, among nonacculturated Asians, says Bill Imada, president of the Imada Wong Communications Group, a Los Angeles ad agency that works closely with the Bank of America, about 90 percent "get a majority of their information from a relative, friend, business associate or at their church." Word of mouth is what carries out the marketing and services.

Perhaps the leader in reaching minorities with financial services, says Dade, is the Bank of America. "We've heard that the bank devotes \$6 million a year to Hispanic marketing, and of the 50 percent of Hispanic households that have checking accounts in California, nine out of 10 are with the B of A."

"That sounds about right," says Rosalind Chamorro, a Bank of America vice president in its Checking Products group. "We do have one advantage, in that the bank's name translates into El Banco de America. To Spanish speakers, that suggests that we are the bank of the United States. Of course, there's more to it than that."

Speaking the *Lingua Franca*

Indeed, ever since A.P. Giannini founded San Francisco's Bank of Italy in 1904 --offering liberal terms to small businessmen and farmers and catering to small depositors and borrowers--the B of A has been attuned to community needs. In Chinatown, the bank's branch employed tellers and operations people who spoke Mandarin and Cantonese; in San Francisco's North Beach area, the *lingua franca* was Italian; in areas with heavy concentrations of Hispanics, Spanish-speaking employees served customers. It wasn't called segmented marketing, but while other banks went after mainstream business, Giannini went after the mainstream and the islands of immigrants who--like his parents --were trying to make their way in the New World.

Since the waves of immigration have not stopped, the Bank of America

continues to cultivate--and help acculturate--new customers. "We view the Hispanic market as having three tiers," explains Chamorro. "The first tier is the 'newcomer', where Spanish is the exclusive language. The second tier is more assimilated; they're bi-lingual, although they probably prefer to speak Spanish. The third tier is the most assimilated. This is the second- and third-generation Hispanics, whose have a strong affinity for their heritage, but straddle both worlds. Each of these tiers has different needs, and perspectives."

A Horror of Stereotypes

Those different views can, at times, make ethnic marketing a dicey proposition. "We had an artist create five different scenes for a bilingual check," recalls Chamorro. "She drew on colourful images from her family life. But the checks drew mixed reviews. We heard from quite a few assimilated Hispanics who thought we were perpetuating stereotypes. The new immigrants loved them, because the scenes represented a time and place that were very close to their personal experience."

Those who market to ethnic minorities worry constantly about projecting stereotypes. "You cannot ever think of all Asian as being alike," says the B of A's Angela Chin, who was born in Viet Nam, raised in Taiwan and has spent the last 20 years in the U.S. "There are differences between vietnamese, Chinese and Koreans; but even within those populations, there are segments. People from large Asian cities are very often quite sophisticated and knowledgeable about financial services. To others from rural areas, it's a brand new world."

For both the unacculturated Hispanic and Asian market, Bank of America invests heavily in education. Through cooperative ventures with AT&T, Pacific Gas & Electric Company and other firms, the bank holds community seminars on setting up and using checking accounts, ATM's and how to establish credit. For lunar New Year's, the bank distributed a calendar in various Asian languages, which also contained a prepaid AT&T telephone calling card. Since the holiday is a time of gift-giving, the bank offered six free months of checking. And for the newcomers, says Chin, the literature on how to use the services "is very step-by-step."

That doesn't mean that Asians aren't savvy, or don't have high expectations of financial services providers. "Location is very important in the Asian community," says Imada. "The Chinese, in particular, like to see their money and have easy access to it."

"And even while Asians want their bank to be strong, powerful and well established, they also want it to be personal," adds Chin. "They want to meet and know their bank manager." While casual attire is common in other mainstream American businesses, a bank manager in Dockers would be anathema to an Asian. "The preference is for an old-style banker in a suit."

Asians also are price sensitive. "They will consider banking with a smaller institution, because these banks have more flexibility and can pay higher interest rates on savings," says Chin. "With this particular market, the Bank of America's major competition doesn't come from the large banks that we compete with in the mainstream, but smaller institutions."

Technologically Comfortable

That price sensitivity is a definite edge for Charles Schwab's discount brokerage service. "New clients will often ask our representatives 'Where are the tips?', says Wallace Louie. "We have to explain the Schwab philosophy of allowing clients to make all the investment decisions, and the idea that conventional brokers might have a conflict of interest in such matters." Schwab follows its discount prices with more service than most brokerage houses, which may have Chinese or Korean-speaking brokers, yet often in offices remote from the customer.

Thus, the reason for Schwab's Asia Pacific Center on San Francisco's California Street, and a just-opened office in Southern California. The company advertises in World Journal, a Chinese-language daily distributed in North California and in television print and direct mail, targeting Asian population centers in San Francisco, Los Angeles, New York, Chicago and Hawaii. Started just six years ago, Schwab's Asian marketing and service program--remember it's 1 percent of the business and generates 5 percent of the profits--is a raging success.

"We were, to be honest, surprised," says Louie. "The company promotes itself in the mainstream by using Chuck (that's Charles Schwab) as an image.

We knew that Asians would realize we've been around, are large, well established and a safe place in which to put their money. But Schwab is almost impossible to pronounce in Chinese and other Asian languages. A lot of customers still can't pronounce it, but that doesn't seem to deter them."

Neither did the fact that the instructions for Schwab's TeleBroker service--a means to make trades and investment changes by using a touch-tone phone--were once broadcast only in English. "You save an additional 10 percent when you use TeleBroker," says Howard Dade, "and we found that 40 percent of all trades by Asians were going through this system, even though a lot of those customers had to get a translation and then memorize the steps. Well, we now have TeleBroker numbers that give instructions in Cantonese and Mandarin, but it does to show the technical sophistication of these clients."

And that, adds Louie, should be obvious anyone who has walked through Hong Kong. "They are way more in tune with using wireless phones than are mainstream Americans." Meanwhile, the Asia Pacific Center itself has evolved into a marketing symbol right along with Chuck Schwab. Its presence, with Chinese--speaking representatives, signifies a commitment to that market segment.

However, while Schwab spends considerable time teaching new arrivals about mutual funds and other investment options, Dade says the company has also learned from its ethnic clients. "This program has opened up our international horizons, because many of these clients are sophisticated investors. Because of some very aggressive latin American clients, who wanted to trade in commercial paper, we've developed those paper programs for our mainstream business. And our Asian investors are links to that part of the world."

Not Losing Your Religion

Just as A.P. Giannini started the Bank of Italy to serve the needs of a specific ethnic, Charlie Kassab, a banker of Lebanese descent, realized that the burgeoning Arabic-speaking population of Dearborn, Michigan, didn't have a financial institution to call its own. The chairman of the Huntington Banks of Michigan--with about \$1.7 billion in assets, it's an affiliate of Huntington Bancshares--Kassab opened a Dearborn branch in 1989, and staffed it exclusively with immigrants or Americans of Arab descent.

"It's now one of our most successful branches," says current chairman and CEO Chuck Dhart. "Over the past decade, Dearborn has attracted more and more people from that part of the world, about 75,000 now. These people run shops, restaurants and other businesses. They come to branch in which many of the women wear traditional Arab clothing. Their language is spoken, and they refer us to their friends." The same is true at another Huntington branch in Hamtramck, an enclave of Polish immigrants. It's staffed by Polish and other Slavic language speaking employees.

The Dearborn branch has had no problems working with those of Islamic faith. "We did have a couple of customers who said they couldn't accept the interest that had accrued on their accounts," says Dhart. (The Koran prohibits usury.) "But most immigrants pass through a transition," he adds, "and quickly grow comfortable with what it takes to make it in America."

The Michigan bank's parent, Huntington Bancshares, had a slightly tougher time putting another minority group into the banking comfort zone.

Like many institutions, Huntington was under pressure to increase its minority loans, but when it advertised in neighborhoods with low and middle -income African-Americans, the campaigns went nowhere. Huntington Bancshares Inc., an \$18 billion regional bank holding company headquartered in Columbus, Ohio, conducted market research among 200 low to moderate-income households, comprised primarily of African-Americans, and found that only 52 percent had checking accounts. yet all those questioned had enough income to make good use of a checking account and other financial services.

Instead, the bank found, they purchased money orders to pay all bills, went to high-interest finance firms for loans and used storefront check-cashing services, some of which charge 5 percent of the transaction as a fee. In meetings with community leaders, Huntington learned that, in poor areas, banks simply aren't trusted.

Building Faith--With a Partner

And with good reason. Many banks have failed to focus on the needs of lower -income customers and have kept them out through such punitive measures as service charges on low account balances. Thus the popularity of

check-cashing services and money orders--one pays only when one needs to. What's more, banks that don't even have much of a presence in low-income neighborhoods rarely make loans to low-income clients, even for relatively small accounts.

To overcome this high level of mistrust, the bank got religion. After all, who is trusted within these communities? The church. So, in 1991, working with consultants and pastors, Huntington founded its community Centered Banking Program. The bank pays churches "advertising fees" for each account or loan that's placed with the Huntington, sums that range from \$15 to \$250. Today, the bank works with more than 165 churches and has booked roughly \$45 million in mortgages, mostly small loans, yet at market rates. Just as important, if not more so, is the way in which Huntington has drawn customers to much needed banking services.

Parishioners receive bank services at special rates. Installment loans carry interest rates a few percentage points lower than what is charged other customers--and certainly lower than what finance companies take. Checking accounts cost only \$2 per month and allow participants to write up to 20 each month without extra fees. Even parishioners who don't sign up for bank services can acquire a "Community Centered Identification Card," which enables them to cash government checks at a Huntington Branch for just \$2--far less than the usurious check-cashing services.

"The bank offers these clients convenience, access through ATM services, low fees and a number to call so they can talk with their banker," says Huntington spokesman David Jacobs. For its Community Centered Banking efforts, Huntington was recently honored with a Corporate Partnership Award by the Columbus-based Eastern Union Missionary Baptist Association. the award recognizes institutions that have shown exceptional support for the National Baptist Convention and its associate groups.

What's more, Huntington is now expanding Community Centered Banking to its markets in West Virginia, florida and elsewhere. Like those at Bank of America and Charles Schwab, such programs are bringing islands of clients and investors into the financial mainstream. That's profitable for the companies providing the services, and beneficial for clients, too.

While selling donuts may seem like a modest way in which to enter a society, one should never underestimate the power and growth of these immigrant groups. "The other thing about Asian and Hispanic clients," says Bank of America's Chamorro, "is that they're extremely loyal."

Win them over and make them happy, and you'll get their business, their friends' business and their family's, and perhaps generations to come. And make no mistake, by the second or third generation, these immigrants will be producing, selling and investing in a lot more than donuts.

ZoSo ITK XON9 58 AET5 753 ARC2 558585 PIL RCH

Checking the Quotes

It is shortly after noon, and, for the moment, it's quiet in the wide lobby of the Charles Schwab office on San Francisco's California Street, where identical sets of computers, flashing quotes from the stock market, sit on each side of the room. To the right, all three customers are Caucasian. To the left, the half-dozen curious investors are exclusively Asian. While the office is open to everyone, this left side is part of Schwab's Asia Pacific Center.

It's where representatives such as Carly Fong speak the language of the brokerage's customers, be English or Cantonese. And, on this day, Chi Wai Lui, a 67-year-old native of china, has come to check his stocks and U.S. Treasury bonds. With Fong translating, Chi explains that his friends referred him to Schwab and that he feels much safer knowing that the savings keeping his retirement comfortable are held by a large firm.

"I worry about the risk of opening an account with a small firm," he says, not looking directly at either his questioner or at Fong--a distinctly Asian cultural custom.

William Ton, a second-generation San Francisco-born Chinese who works for an insurance company, would be perfectly comfortable with a conventional brokerage house. Still, he says, he prefers Schwab's discount rates and the ambiance of the Asia Pacific center.

The same is true of Burmese-born Peter Yuan, who came to the U.S. in 1979. A graphics and production manager for a bank's communications department, Yuan calls himself a "very active trader. I can use the Tele-broker service to make 24-hour trades. But, having said that, I think the

Schwab people make a strong effort to keep their clients up to date with information. It's very service-oriented, no matter where you're from."

Towards 1:00p.m., more and more Asians congregate about the stock quotes on the left side of the room. The space is no longer silent: the Chinese customers are now talking and gesticulating animatedly, in their own tongue.

"People think Asians are always so quiet,,," says Fong. "But when these investors get together I hear them discussing their strategies and having fun. The Asian side is always noisier than the other."

Jay Stuller.Stuller

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MULTIMEDIA KIOSKS COME OF AGE - NORTH COMMUNICATIONS ANNOUNCES NEW ASSOCIATIONS, PRODUCTS, OPEN STANDARD

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* Microsoft, EDS, Xerox, Compaq, Oracle, Silicon Graphics, Stratus form foundations of Info/Media

* WebEngine: New Product provides Public Access to the Internet on a Touchscreen

* Social Security, Texas, Pennsylvania, Florida among current contracts

At the Government Technology Conference here today, North Communications announced Info/Mediat, a comprehensive set of business associations and products which establish an open standard for the fast-growing multimedia kiosk industry. Microsoft, EDS, Xerox, Compaq, Silicon Graphics, Oracle, MicroAge, Elo TouchSystems, MicroTouch, Stratus, Science Applications International Corporation (SAIC), Ameritech and BellSouth will form the foundations of the Info/Media standard, and participate with North in marketing it to their customers.

"Multimedia kiosks are an important part of the spectrum of options in Information Superhighway networks," said Michael North, President. "Any enterprise that does business with the general public and is looking to make services available electronically should evaluate public access touchscreen systems as part of their strategy; they provide unique benefits that complement desktop access through the Internet and other online services."

The relationships announced today are diverse in nature; they involve marketing, joint technology, hardware, manufacturing, systems integration, service and operations.

North Communications is now a Microsoft Solution Provider - Partner Level, and will have their newly-announced products, including touchscreen access to the World Wide Web and connectivity to Windows NT, highlighted in the Microsoft booth at Government Technology West this week. EDS will implement Info/Media network management systems on gateway processors, and will operate complex internetwork projects that connect kiosks to mainframe systems. Xerox provides round-the-clock field service and maintenance, as well as special laser printers, and Compaq provides personal computers to be incorporated into North kiosks. Stratus provides fault-tolerant Info/Media servers to support connectivity to diverse back-end hosts. Silicon Graphics is developing, with North Communications, a version of the Info/Media Enginet for its Indy desktop workstations, and will market the new product. Info/Media products work on Windows NT, OS/2 and UNIX operating systems. Additional announcements will be made in the next few weeks.

"Touchscreen kiosks provide interactive services for people on the go, in public places, at stores, malls and offices," said Kathleen Pierce Simonsen, Worldwide Marketing and Business Manager for Microsoft's Interactive Information Initiative. "They're a practical implementation of the Superhighway vision, available today, and the industry needs an open standard in order to grow. Kiosks are an idea whose time has come."

Organizations as diverse as the States of California, Pennsylvania, Texas, Florida, Hawaii, Arizona and Washington, the Social Security Administration, City of Brisbane Australia, Republic of Singapore, the Province of New Brunswick Canada, the City of Santa Monica and L.A. County are using North Communications systems today in their kiosk networks. New York City has announced its intent to deploy such a network. Current installations center around employment, motor vehicles, human services, legislative information, bill payments, travel and entertainment, public transportation, traffic and family courts, tax, licenses and revenue,

banking and insurance, and interactive advertising.

Joining North Communications last week as its new Senior Vice President of Sales and Market Development is John Poland. A former IBM executive in charge of sales and marketing for state government in California, Poland helped to launch Info/ California, one of the first multi-agency state kiosk networks. Poland said, "Up to now, kiosk programs have been developed on a custom basis for large customers. Now, standard products and open systems technology will provide the key to rapid, cost-effective deployment, and will facilitate the quick, profitable expansion of the kiosk industry." The products announced today are as follows:

Info/Media Editor: development system for online, transactional kiosk networks
Info/Media Engine: runtime system for individual kiosks on the network
Info/Media Server: hub-gateway system, provides network management, diagnostics, operations, connectivity to diverse back-end hosts

Info/Media Reporter: database management system, provides statistics, financial management

Fast Lane: motor vehicles department transactions, including vehicle registration and renewal

QuickCourt: Family and State Court pro per filings, including dynamic forms
TouchWorkst: Employment service programs, including job match and self-registration

LegiConn: State, Provincial, County, Federal access to legislative records, schedules

MetroTouch: Local, city government information, travel, tourism, entertainment, corporate sponsorship, interactive advertising

Berkeley Kiosk: compact, general-purpose retail and office enclosure
Stanford Kiosk: tough, security, outdoor enclosure, for check and document transactions

Cornell Kiosk: sit-down enclosure, for in-depth interactions, libraries, research

Loyola Kiosk: low-profile, entry-level enclosure, for low-cost basic functions

TouchVision: real-time, two-way video conferencing on a touchscreen, with shared data

WebEngine: tools for translating existing Info/Media programs into World Wide Web applications, and for providing runtime access to WWW applications within Info/Media programs

Also announced today is the Info/Media Qualified Developer Program; interested developers are invited to contact the company. They will be offered training in how to install and customize the standard products, develop original applications, and will be provided marketing support. This includes complete software, production, and systems management training, and marketing rights to the software and kiosk enclosures. North Communications designs, installs and operates complex public access touchscreen networks; these networks often feature online transactions, credit and debit card payment, multiple languages, forms dispensing and advanced digital video. The privately-held company, based in Marina del Rey CA, was founded in 1986. Its chief investor is John W. Kluge, head of Metromedia, which has world-wide investments in entertainment, telecommunications, manufacturing, agriculture, restaurants, software and new media.

CONTACT: North Communications Tel: +1 310-577-7700 Fax: +1 577-2866

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Entry 69 of 72

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Nov 3, 1992

US-PAT-NO: 5161231

DOCUMENT-IDENTIFIER: US 5161231 A

TITLE: Processing system which transmits a predetermined error code upon detection of an incorrect transmission code

DATE-ISSUED: November 3, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Iijima; Yasuo	Yokohama	N/A	N/A	JPX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Kabushiki Kaisha Toshiba	Kawasaki	N/A	N/A	JPX	03

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 ATTY-AGENT-FIRM: Cushman, Darby & Cushman

ABSTRACT:

According to a portable electronic apparatus processing system of this invention, when an IC card receives instruction data, it checks if a function code can be completely input. If the function code is not completely input, the IC card sets data "FF" (hexadecimal code) as the function code, and outputs it to an IC card reader/writer. When the IC card reader/writer outputs an instruction to the IC card, it appends sequential number data to the instruction. The IC card executes processing corresponding to the supplied instruction. When the IC card outputs the processed result to the IC card reader/writer, it appends the sequential number data from the IC card reader/writer to the processed result and outputs it.

6 Claims, 18 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC
Help					Logout				

WEST

[Help](#)[Logout](#)

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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[First Hit](#)[Previous Document](#)[Next Document](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC
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Document Number 69

Entry 69 of 72

File: USPT

Nov 3, 1992

DOCUMENT-IDENTIFIER: US 5161231 A

TITLE: Processing system which transmits a predetermined error code upon detection of an incorrect transmission code

DEPR:

FIG. 1 shows the arrangement of a card handling apparatus used as a terminal for a home banking system or a shopping system to which an IC card as a portable electronic apparatus is applied. The card handling apparatus comprises card reader/writer 2 for performing read/write access of the IC card 1, keyboard 4 for inputting data such as a personal identification number (PIN), CRT display unit 5 for displaying transaction data, printer 6 for printing out the transaction data, floppy disk 7 for storing the transaction data, and central processing unit (CPU) 3 for controlling card reader/writer 2, keyboard 4, CRT display unit 5, printer 6, and floppy disk 7.

ORPL:

English Patent Abstract of Japan "Data Transmission System." vol. 10, No. 75 (Nov. 5, 1985).

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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[First Hit](#)[Previous Document](#)[Next Document](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC
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[Help](#)[Logout](#)

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[Help](#)[Logout](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)

Search Results -

Terms	Documents
14 and (banking or financial)	2159

Database:

Refine Search:

Search History

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	14 and (banking or financial)	2159	<u>L5</u>
USPT	language\$1 or linguistic\$1	53952	<u>L4</u>
USPT	11 and pt	1	<u>L3</u>
USPT	11 and international	1	<u>L2</u>
USPT	5420405.pn.	1	<u>L1</u>

[Help](#)
[Logout](#)
[Main Menu](#) | [Search Form](#) | [Result Set](#) | [Show S Numbers](#) | [Edit S Numbers](#) | [Referring Patents](#)
[First Hit](#)
[Previous Document](#)
[Next Document](#)
[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#)

Document Number 4

Entry 4 of 2159

File: USPT

May 30, 2000

US-PAT-NO: 6070152

DOCUMENT-IDENTIFIER: US 6070152 A

TITLE: Framework for business applications providing financial integration

DATE-ISSUED: May 30, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Carey; James	Rochester	MN	N/A	N/A
Carlson; Brent	Sollentuna	N/A	N/A	SEX
Dahl; Tore	Hasselby	N/A	N/A	SEX
Graser; Timothy	Rochester	MN	N/A	N/A
Nilsson; Anders	Hagan	N/A	N/A	NOX
Pasch; Mark	Rochester	MN	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY	N/A	N/A	02

APPL-NO: 9/ 038351

DATE FILED: March 11, 1998

PARENT-CASE:

The present application is related to the following commonly assigned co-pending applications filed on the same date as the present application, each of which is herein incorporated by reference: U.S. Ser. No. 09/038,024 by Kathryn Bohrer et al., entitled "A Method of Developing a Software System Using Object Oriented Technology"; U.S. Ser. No. 09/038,352 by Brent Carlson et al., entitled "A Method of Using Decoupled Chain of Responsibility"; U.S. Ser. No. 09/038,349 by James Carey et al., entitled "Framework for Business Applications Using Cached Aggregate and Specification Key"; U.S. Ser. No. 09/038,025 by James Carey et al., entitled "Software Business Objects in a Multi-level Organizational Structure"; U.S. Ser. No. 09/081,114 by Brent Carlson et al., entitled "Method of Error Handling in a Framework"; and U.S. Ser. No. 09/038,381 by Anders Nilsson, entitled "A Method of Locating Software Objects in Different Containers".

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: EP 97114039

FOREIGN-PRIORITY-APPL-DATE: August 14, 1997

INT-CL: [7] G06F 17/60

US-CL-ISSUED: 705/35; 705/1, 707/103

US-CL-CURRENT: 705/35; 705/1, 707/103
FIELD-OF-SEARCH: 707/103, 705/9, 705/35, 705/8, 705/1

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5634124</u>	May 1997	Khoyi et al.	707/103
<u>5826239</u>	October 1998	Du et al.	705/8
<u>5864862</u>	January 1999	Kriens et al.	707/103
<u>5878427</u>	March 1999	Wahead et al.	707/103

OTHER PUBLICATIONS

Adair, Deborah, "Building Object-Oriented Frameworks", AIXpert, Feb. 1995.
Johnson, Raph E., "Frameworks Equal (Components +Patterns)", Communications of the ACM, Oct. 1997.
Quellette, Tim, "Middleware On Way For Object-Based Apps", Computerworld, Feb. 17, 1997.
Biggerstaff and Perlis, Software Reusability vol. II: Applications and Experience, Addison-Wesley (ACM Press), 1989.
Dave K. Kythe, "The Promise of Distributed Business Components", AT&T Technical Journal, vol. 75, No. 2, Apr. 1996, pp. 20-28.

ART-UNIT: 271

PRIMARY-EXAMINER: Voeltz; Emanuel Todd

ASSISTANT-EXAMINER: Morgan; George D.

ATTY-AGENT-FIRM: Gamon; Owen J.

ABSTRACT:

The present invention relates to a method of developing a software system using Object Oriented Technology and frameworks for developing a business application. The present invention solves this problem with a framework framework comprising a using non-financial component integration base class, a target financial component integration base class, and a generic data conversion engine. The present invention is applicable in the technical field of application development of software systems, e.g. for a business application as Financial or Logistic and Distribution, wherein it is the purpose of frameworks to provide significant portions of the application that are common across multiple implementations of the application in a general manner, easy to extend for specific implementation.

10 Claims, 7 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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First Hit	Previous Document	Next Document
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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMOC
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Help	Logout
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Help

Logout

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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First Hit

Previous Document

Next Document

Full

Title

Citation

Front

Review

Classification

Date

Reference

Claims

KMC

Document Number 4

Entry 4 of 2159

File: USPT

May 30, 2000

DOCUMENT-IDENTIFIER: US 6070152 A

TITLE: Framework for business applications providing financial integration

ABPL:

The present invention relates to a method of developing a software system using Object Oriented Technology and frameworks for developing a business application. The present invention solves this problem with a framework framework comprising a using non-financial component integration base class, a target financial component integration base class, and a generic data conversion engine. The present invention is applicable in the technical field of application development of software systems, e.g. for a business application as Financial or Logistic and Distribution, wherein it is the purpose of frameworks to provide significant portions of the application that are common across multiple implementations of the application in a general manner, easy to extend for specific implementation.

BSPR:

In Object Oriented Technology it is generally easier to debug, maintain, and enhance object oriented software. The most popular object oriented programming languages are probably "C++", "JAVA", and "Smalltalk". The concept that both data and methods are contained inside an object is called "encapsulation". Part of the concept of encapsulation is that an object has a predictable way of communicating with other objects, a so called predictable "interface" or sometimes also called the method contract.

BSPR:

Frameworks provide a way of capturing a reusable relationship between objects, so that those objects do not have to be reassembled in that same relationship every time they are needed. Frameworks provide a way of grouping multiple objects together to perform some function which should not have to be thought through each time at the underlying object level. For example, a PRINT framework would consist of all the objects necessary for a programmer to easily print something on any printer, and would probably include objects for printer selection, spooling to disk or error detection as "out of paper". Frameworks can be regarded as a group of software objects which contain a technical foundation for a software application. For example in the business field of Financial, Logistic and Distribution or Production. Although a framework represents a skeleton of a software application, usually a framework is not an executable software program.

BSPR:

In particular, the present invention provides a framework to be used for developing a software system, e.g. for a business application, said framework is a financial integration framework characterized in

that said financial integration framework is composed of three major components: Using non-financial component integration base classes, target financial or General Ledger component integration base classes, and a generic data conversion engine.

DRPR:

FIG. 2 shows the three main sections comprised by the financial integration framework.

DEPR:

As shown in FIG. 2, the financial integration framework comprises of three main sections 201, 202, and 203. The first section 201 is a set of base classes which are used by the particular source of financial transactions. The second section 202 is a generic data conversion engine which uses the specializations in the first section 201 as their abstract base classes to map from the particular source's particular items of interest to associated items in the interface of the General Ledger. The third section 203 consists of the interface to the General Ledger (GL) which allows information to be generically passed to the General Ledger and hide the particular implementation or if it is even preset.

DEPR:

A business application component that wishes to use the financial integration framework must first define a set of concrete classes which are subclassed from base classes provided by the framework. The function of these concrete classes is primarily derived from the framework base classes. The domain-specific concrete classes provide additional isolation between the business application component and the framework and allow the component developer to define a domain-specific interface that is meaningful to the remainder of the component. This greatly improves ease of use of the framework during application development.

DEPR:

Subclasses of the GenericGLDissectionCreateTemplate class are used to encapsulate all the information needed by the financial integration framework to create a GenericDissection. Each template subclass is associated with a DomainGenericDissectionType instance, which is used by the generic data conversion engine to select the proper mapping subset when processing the template. Each template subclass allows the application component developer to pass all the necessary domain-specific information that is required for the dissection when an instance of the subclass is instantiated. The subclass then packages this information into a form which is compatible with the generic data conversion engine. Part of this processing includes building an Integration Key using the domain-specific subclass described earlier.

DEPR:

The financial integration framework further includes a set of base classes which support the interfaces used by the generic data conversion engine. This allows the financial integration framework to operate in the absence of a General Ledger application component. The base classes provided by the framework include:

DEPR:

This class represents a specific financial entry (either debit or credit) which is to be posted to the General ledger as part of a journal. It contains a GenericPostingCombination along with quantity and value information.

DEPR:

This class represents a specific business entity within a GenericAnalysisGroup. Instances of this class are defined by the

user. During setup of the financial integration framework, the user associates a GenericAnalysisCode instance with a set of domain-specific object instances. These domain-specific object instances are selected from the AccountControlTypes specified by the user as meaningful for the combination of DomainGenericDissectionType and GenericAnalysisGroup. These mapping pairs form the core of the information which is used by the financial integration framework to process financial transactions.

DEPR:

While the financial integration framework operates in the absence of a General Ledger application component, such a component must be provided by the application in order for any meaningful financial processing to be completed. A General Ledger component is easily integrated into the framework by simply configuring the framework's object factory to replace the generic versions of the classes listed above with replacement classes provided by the General Ledger component. Other components using the financial integration framework--and indeed, the framework itself--are not aware of this class replacement, as all the function needed to complete their portion of the financial integration task is defined at the generic base class level.

DEPR:

The engine also provides a generic journal building process which bundles the generic transactions supplied by the application component into a consolidated form compatible with the General Ledger application component associated with the financial integration framework.

DEPR:

This is a primary problem of the framework, which this invention provides a solution for. An AccessKey/Keyables mechanism defined by frameworks of the present invention allows the financial integration framework to work with any domain-specific class generically (For AccessKey see related patent application "Access Key Objects", filed with the European Patent Office, Application No. 97100566.6, filing date Jan. 16, 1997). Each domain-specific class of interest to an application component is assigned an ID, held generically as a subclass of the framework class AccountControlType, known to the financial integration framework and a position within the Generic Key used by the mapping engine. When a domain defined Dissection is processed by the framework, each domain-specific class instance is wrapped by a Generic Keyable and placed into the zov previously specified position within the Generic Key. This key can then be used during the mapping process for the Dissection. Once contained in this manner, the domain-specific mapping data can be manipulated generically during the search for the user-specified set of Analysis Codes that will make up the Posting Combination for this Dissection.

DEPR:

As shown in FIG. 4, the generic mapping process is part of the generic journal building process supported by the conversion engine. Neither the mapping nor the conversion process is completed at the time the domain-specific application component creates a dissection template instance 401. Instead, these instances are collected and held by the financial integration framework until the application initiates the generic journal building process 402. The first step of this process involves selecting a subset of dissection templates based on a configurable policy, for example based on a specific JournalCreationId provided by the application component when it created the dissection template. Each template in the set is then processed, first by completing the generic mapping which results in the creation of a GenericPostingCombination, followed by building a GenericDissection from the GenericPostingCombination and the

remaining information held by the template. Once the GenericDissection is built, it can be inserted into the GenericJournal 403 created for this subset of dissection templates. After all the dissection templates have been processed in this way, the GenericJournal is posted and financial integration processing is complete.

DEPR:

FIG. 5 shows an example of mapping for one Analysis Group for a particular Generic Dissection Type. In this case the Generic Dissection Type is STOCK VALUE 501, which is used to indicate to the financial portion of the application a change in the value of the stock on hand. The target financial application represents its accounts in pieces. Each piece is called an Analysis Group and represents some aspect of interest to the user. A typical Analysis Group would be Department 502. Within an Analysis Group the specific values are called Analysis Codes 503. For example the Analysis Group Department might contain Analysis Codes like SALES, ENGINEERING, etc. Thus, an account is made up of a set of Analysis Codes each for an Analysis Group.

DEPR:

FIG.7 shows an example of using the maps defined in FIG. 6. In this example the specified Account Control type values are used for each of the Generic Dissection types to determine the appropriate Analysis Codes to build the Account for giving the information to the financial application.

CLPR:

1. A financial integration framework for developing a business application in a software system, wherein the framework is stored on a server, wherein the framework comprises:

CLPV:

a financial integration framework stored on the server, wherein the framework comprises:

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWMC
Help					Logout				

Help

Logout

Main Menu Search Form Result Set Show S Numbers Edit S Numbers Referring Patents

First Hit

Previous Document

Next Document

Full Title Citation Front Review Classification Date Reference Claims KMC

Document Number 1

Entry 1 of 2159

File: USPT

May 30, 2000

US-PAT-NO: 6070179

DOCUMENT-IDENTIFIER: US 6070179 A

TITLE: Method and system for compressing unicode data within a data processing system

DATE-ISSUED: May 30, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Craft; David John	Austin	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY	N/A	N/A	02

APPL-NO: 9/ 026677

DATE FILED: February 20, 1998

INT-CL: [7] G06F 15/00

US-CL-ISSUED: 708/203

US-CL-CURRENT: 708/203

FIELD-OF-SEARCH: 708/203, 341/55, 341/67, 341/90, 341/50

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4701745</u>	October 1987	Waterworth	341/67
<u>5682158</u>	October 1997	Edberg et al.	341/90
<u>5889481</u>	March 1999	Okada	341/50
<u>5929792</u>	July 1999	Herriot	341/55

ART-UNIT: 277

PRIMARY-EXAMINER: Mai; Tan V.

ATTY-AGENT-FIRM: Salys; Casimer K. Ng; Anthony P. Dillon; Andrew J.

ABSTRACT:

A method for compressing data within a data processing system is disclosed. Each unit of data is at least two bytes. As each byte from a data stream is received, a determination is made as to whether or not an identical data byte occurs at a pre-selected interval within a group of bytes already received. In response to a determination that

an identical data byte occurs at a pre-selected interval within a group of bytes already received, only a portion of a subsequent unit of data from the data stream is passed to an output.

18 Claims, 6 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K/MC
Help					Logout				

Help

Logout

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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First Hit

Previous Document

Next Document

Full

Title

Citation

Front

Review

Classification

Date

Reference

Claims

KMC

Document Number 1

Entry 1 of 2159

File: USPT

May 30, 2000

DOCUMENT-IDENTIFIER: US 6070179 A

TITLE: Method and system for compressing unicode data within a data processing system

BSPR:

Electronic information processing and transmission are currently experiencing dramatic growth internationally. Consequently, there is a growing need for internationalization and standardization of information coding formats. The well-known ASCII symbol set, which can only accommodate 256 possible byte symbols, is incapable of accommodating even a small fraction of all the characters and symbols in the world as a whole. Just taking financial documents originated from the United Kingdom as an example, most of them demand an ability to retrieve and display the Pound Sterling symbol (.English Pound.), which is not found in the standard ASCII symbol set. Thus, it is evident that a much larger symbol set is required to handle documents that are in Russian, Greek, Arabic, and various Asian languages.

BSPR:

A new approach in solving the above-mentioned problem is by utilizing a new symbol set known as UNICODE. In essence, the UNICODE symbol set solves the problem of code depletion by allocating two bytes per symbol. For many of the more popular languages, one of the two bytes of a UNICODE symbol serves as a code page specifier and the other byte designates a member of the particular code page set. As a result, data within a document tends to be comprised of byte-pairs, with one byte of each byte-pair being the same. This can be illustrated by the following example of a 36-byte fragment of data. The fragment is first listed as it appears on an ASCII text printer, and then in a hexadecimal format:

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
-----------	-------------	------------	----------------	----------------	-------------------

First Hit

Previous Document

Next Document

Full

Title

Citation

Front

Review

Classification

Date

Reference

Claims

KMC

Help

Logout

[Help](#)
[Logout](#)

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
-----------	-------------	------------	----------------	----------------	-------------------

[First Hit](#)
[Previous Document](#)
[Next Document](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KVMC
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Document Number 6

Entry 6 of 2159

File: USPT

May 30, 2000

US-PAT-NO: 6070149

DOCUMENT-IDENTIFIER: US 6070149 A

TITLE: Virtual sales personnel

DATE-ISSUED: May 30, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tavor; Onn	Ramat Hasharon	N/A	N/A	ILX
Avraham; Gila Ben	Netania	N/A	N/A	ILX
Shevchenko; Vadim	Netania	N/A	N/A	ILX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Activepoint Ltd.	Netania	N/A	N/A	ILX	03

APPL-NO: 9/ 109726

DATE FILED: July 2, 1998

INT-CL: [7] G06F 17/60

US-CL-ISSUED: 705/26; 706/47

US-CL-CURRENT: 705/26; 706/47

FIELD-OF-SEARCH: 705/26, 705/27, 705/35, 705/1, 705/10, 706/47, 706/46, 706/11, 706/12

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4992940</u>	February 1991	Dworkin	705/26
<u>5454106</u>	September 1995	Burns et al.	395/600
<u>5581664</u>	December 1996	Allen et al.	706/46
<u>5586218</u>	December 1996	Allen	706/12
<u>5696962</u>	December 1997	Kupiec	395/604
<u>5701399</u>	December 1997	Lee et al.	706/11
<u>5715399</u>	February 1998	Bezos	705/35
<u>5774868</u>	June 1998	Cragun et al.	705/10
<u>5852814</u>	December 1998	Allen	706/13
<u>5890139</u>	March 1999	Suzuki et al.	705/27
<u>5905973</u>	May 1999	Yonezawa et al.	705/27
<u>5926798</u>	July 1999	Carter	705/26
<u>5937389</u>	August 1999	Maxwell	705/10
<u>5978784</u>	November 1999	Fagg, III et al.	706/11
<u>5983200</u>	November 1999	Slotznick	705/26
<u>6012051</u>	January 2000	Sammon, Jr. et al.	705/26

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"Brightware Amer Finance: Brightware and American Finance Team to Provide Mortgages in Minutes on Internet.." Business Wire, Feb. 28, 1997.

Tomasula, D. "Self-service Web Ware Could Make Service Reps Obsolete." Wall Street & Technology, vol. 15, No. 3, p. S26, Mar. 1997.

"Brightware, Inc. Ships Brightware 1.0 to Automate Selling on the Net." Press Release, Aug. 4, 1997.

"Brightware Ships Web's First Automated Real-time Advice Agent." Press Release, Jun. 29, 1998.

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Tehrani, N. "The Internet and Call Center . . ." Telemarketing & Call Center Solutions, vol. 15, No. 2, p. 4, Aug. 1996.

Bucholtz, C. "Working with the Web, BellSouth Brings 'Do it yourself' Applications to Customer Service." Telephony, Aug. 25, 1997.

Nelson, M. "Neuromedia Offers Automated Online Service." Infoworld, vol. 20, No. 13, p. 20, Mar. 30, 1998.

ART-UNIT: 275

PRIMARY-EXAMINER: MacDonald; Allen R.

ASSISTANT-EXAMINER: Crecca; Michele Stuckey

ATTY-AGENT-FIRM: Friedman; Mark M.

ABSTRACT:

A method for enabling users over a network or over the WWW to interact with an interactive sales representative system for providing sales guidance. The system offers the user products, services, or ideas (the "products") according to parameters collected from the user. The system guides the customer to retrieve the desired products. If the system does not have a product matched to the customer requirements, preferably it will operate a mechanism for suggesting alternatives which are the closest to the customer requirements. The system will execute various sales tools and techniques to help and assist the customer and to convince the customer to purchase a product. By guiding the customer to the target product, the system will shorten the search cycle for the customer as well as find better matched products. The system will provide market advisory, suggest, recommend, discuss (in written form and optionally voice form), comment, advise the customer regarding the products. The system might advise the

customer in any other aspects as well (such as providing personal feedback). The system adds graphics, animation, 3D, movie clips, voice and other effects to make the session enjoyable for the customer. The system is capable of executing various tools and techniques to improve its sales capabilities and bring better sales results.

6 Claims, 22 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC
Help					Logout				

Help

Logout

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC

Document Number 6

Entry 6 of 2159

File: USPT

May 30, 2000

DOCUMENT-IDENTIFIER: US 6070149 A

TITLE: Virtual sales personnel

BSPR:

Hereinafter, the term "Web browser" refers to any software program which can display text, graphics, or both, from Web pages on World Wide Web sites. Hereinafter, the term "Web page" refers to any document written in a mark-up language including, but not limited to, HTML (hypertext make-up language) or VRML (virtual reality modeling language), dynamic HTML, XML (extended mark-up language) or related computer languages thereof, as well as to any collection of such documents reachable through one specific Internet address or at one specific World Wide Web site, or any document obtainable through a particular URL (Universal Resource Locator). Hereinafter, the term "Web site" refers to at least one Web page, and preferably a plurality of Web pages, virtually connected to form a coherent group.

BSPR:

Hereinafter, the term "applet" refers to a self-contained software module written in an applet language such as Java or constructed as an ActiveX.TM. control.

DRPR:

FIG. 14 is a schematic block diagram of an illustrative financial purchase manager according to the present invention;

DEPR:

Referring now to the drawings, FIG. 1 is an exemplary block diagram of a virtual sales representative system according to the present invention. Block 10 of the system shows the Sales Engine Unit core routines: rules linkage, "lookAhead", reading information from the e-shop and basic rules processes as described in more detail below. Block 12 is the Business Logic module for controlling the departments and business strategies. Block 14 shows the Financial Purchase Management system, including the credit card charge security of the present invention. Block 16 includes various arithmetical functions such as the arithmetic parser. Block 18 shows the Application Support module, including the generation of sales comments, department messages and multimedia output. Block 20 is the module providing the Web server technologies and block 22 is the GUI (graphical user interface) platform for interactions with the user. Block 24 is the E-Shop and includes links to the various modules required for the interaction of the virtual sales representative and the user. Block 26 is a software module providing the option to transfer the interaction to "chat mode" with user. Block 28 is the Detection Engine. All of these software modules and components of the present invention are described in more detail below.

DEPR:

In this case, instead of the usual "if X=Y and C=F and . . . then P" where all the topics X, C, . . . and the product P reside in a file written in the SL language, the condition (or the result if a product) of the rule will contain the following: a reference to an external file which is the name of the file; and the index of the entry corresponding to the topic/product.

DEPR:

The user's responses to the SEU's queries are always processed by the "InputAgent" (Block 74) which translates the data received from the user (in the HTML format) to a language that the SEU understands and saves it into the virtual memory for further usage by "EngineCore" (Block 42).

DEPR:

Day2day (a set of slang language remarks, called day2day since it is designed to simulate simple and common daily language, which can also be described as a "pleasantry". All are combined in a special database for this purpose).

DEPR:

FIG. 14 shows an illustrative embodiment of the Financial Purchase Manager (FPM). The FPM provides financial service of purchases. It enables the display of the full list of goods bought, their prices, any discount and the total amount which the client should pay.

DEPR:

Pressing the "Continue" button (FIG. 14, Block 170) takes the user to the credit card charge process (FIG. 14, Block 168). The Financial Purchase Management unit may include the credit card charge unit, or else alternatively and preferably the units can be separate but in communication with each other.

DEPR:

One implementation can be to locate the decoder program at the credit card company, so the card number is not available even to the VSD. The VSD receives the number only as a code representation while the true card number stays at the financial institution.

DEPR:

There are two approaches developed to embed the SEU in portable code scripts, such as Java applets. Either the SEU is written in portable code language, or the SEU is invoked by an interpreter which was written in a portable code language.

DEPR:

all of the components are downloaded to the client computer (FIG. 19, Block 206). For this embodiment, the SEU must be implemented by an interpretable language (such as BASIC).

DEPR:

The term "interpreter" refers to an interpreter from the source language of the SEU to the destination language (the portable code).

DEPR:

The Shopping Smart function can optionally and preferably be implemented in various languages by using various technologies. The implementations below are possible options for full and partial solutions.

DEPR:

For example, for the SEU based implementation example and structure, all the data processing and calculations are made by the SEU. When the user contacts the Shopping Smart icon with the mouse or other

pointing device, preferably substantially without "clicking" on the icon, the `onMouseOver` event launches the "ShopSmart" function written in the page in a form of script. The "ShopSmart" function launches the SEU in a special mode for Shopping Smart, in order to run Financial Purchase Manger mechanism. The SEU sends the response to Shopping Smart window in a form that was described above. Pressing the "Recalculate" button will send the updated information to the SEU. The SEU sends the results back to the Shopping Smart window as is usually done in regular CGI or other Web Server Technology processes.

DEPR:

The procedure for operating the "Shopping Smart" function is as follows. The ShopSmart procedure opens a window with an HTML (or other markup language) form (or other similar structure). The ShopSmart procedure calls the "open" function in order to open the window. The URL that is passed to "open" as a parameter is:

DEPR:

Alternatively and preferably, the Shopping Smart function can be implemented by using substantially only JavaScript (or other similar languages as advanced markup language for all types of scripts, such as Java language and the like. When the user contacts The Shopping Smart icon with the mouse, the `onMouseOver` event will launch the "ShopSmart" function. However, in this implementation, the function works differently. The function is operated as follows.

DEPR:

The reasons for constructing different types of virtual sales representatives include the ability to use different languages, language styles, multimedia representations, or to give the user a variety of "people" to choose from. Another reason is that the use of multi-file VS is extremely useful when linked to an existing site. Yet another reason is to enable the user to receive a recommendation from each display on the GUI separately, instead of forcing the user to go through the session from the beginning.

DEPR:

In the case of an existing chat, the function scans the current channel's storage room for chat elements (string in form "sm.sub.--msg=. . ." and user.sub.--msg=. . .") and extracts the parts of chat text from them. Then, a markup language page is built from the gathered text and sent to the HTTP server.

DEPR:

After registering the sales representative, the chatter sends a page with a "Line is free" message to the sales representative. The page is refreshed every 10 seconds in order to check whether the browser has started a chat (the connection is alive). Refreshing is done by using a standard markup language tags within the markup page header.

DEPR:

The function "BuildUserResponse" builds a frame of markup language pages (as HTML, DHTML and like).

DEPR:

The Chat History page is automatically refreshed every 15 seconds. The refresh is implemented by using standard mark up language tags within the Chat History page header.

DEPR:

The function "BuildSales representativeResponse" builds a frame of markup language pages (as HTML, DHTML and the like).

DEPR:

The advanced parser link to the SEU is shown in FIG. 22. The parser is responsible for a) translating the user's queries (written in natural language) to conditions, b) skimming the rules in the VS file to find rules that contain those conditions, c) handling cases such as inappropriate words by activating several side mechanisms. In the last situation, those mechanisms preferably answer the user in a form of "Don't be rude", for example.

DEPR:

The whole mechanism works with two different files. The first file, a general file, holds the language fragments such as prepositions, adjectives, nouns, etc. The second file, the product keyword file, holds the professional terms that are relevant to the VSD's industry. For example, if the industry is diamonds then the file may contain words like "carat", "cut", "clarity".

DEPR:

The language is defined with a number of relations between the product keywords, the most important being the schema. A schema is a description of the logical structure of the VS. In the parser, the schema is the "entity network" for the language. A schema entry follows the form: ENTITY ASSOCIATION ENTITY; this signifies that the two entities are bound together by the given association, such as 'diamond' from 'country', 'cut' of 'diamond', 'price' in 'shequels'.

DEPR:

First, the "DumpRedundant" routine is started to remove all punctuation marks and the words that are marked as "words to be ignored". "DumpRedundant" returns a list of words on which the parser itself is invoked, in the form of the "Comprehend" routine (FIG. 22, block 268). The "Known" routine (FIG. 22, block 312) is then launched. It travels down the list of words and checks every word to see if it's a known word. The routine looks for the word both in the language file and the professional terms file. In case unknown words are found, "Known" (FIG. 22, block 312) gathers them all in a list. After that, "Known" (FIG. 22, block 312) reports to the user that a portion of the question was not understood. The user is given two options, to formulate the question differently, or to give up the question. This output is done through "HandleErr".

DEPR:

"ExpressUnit" is a routine which uses an entity as a parameter and searches the measuring unit in the input list, from left to right. The procedure starts at the first word in the list. "ExpressUnit" then searches for that word first in the set of units from the file containing the professional terms and then, if the word is not found in the professional terms file, the procedure looks in the language file. When examining the professional terms file, "ExpressUnit" only considers the units which are defined for the current entity. If the word is found there, the word is simply returned, because the parser assumes that the query is of the form "Speed of 233 MHZ". If the word was not identified as a correct unit for the current entity, "ExpressUnit" checks if the word is an adjective. If it is an adjective, the word is skipped and "ExpressUnit" continues by examining the next word.

DEPR:

When any of the routines "AskUser" (FIG. 2, block 36), "TryRecommend" (FIG. 2, block 46) or "DelTryRcmmd" (FIG. 2, block 48) consider a keyword, a text area is output, by using any standard mark-up language, under the name .

Help

Logout

Main Menu

Search Form

Posting Counts

Show S Numbers

Edit S Numbers

Search Results -

Terms	Documents
110 and (user\$1 adj preference\$1)	13

Database: US Patents Full-Text Database

110 and (user\$1 adj preference\$1)

Refine Search:

Search History

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	110 and (user\$1 adj preference\$1)	13	<u>L12</u>
USPT	110 and user\$1 adj preference\$1	13	<u>L11</u>
USPT	19 and (computer\$1 or server\$1 or pc or personal computer or terminal\$1)	61	<u>L10</u>
USPT	18 and (user\$1 or client\$1 or customer\$1)	61	<u>L9</u>
USPT	12 and (atm or automated teller machine)	61	<u>L8</u>
USPT	11 and (french or japanese or chinese or italian or arabic persian)	56	<u>L7</u>
USPT	11 and (english or french or spanish or japanese or chinese or arabic or urdu or persian) adj (display)	0	<u>L6</u>
USPT	11 and (english or french or spanish or japanese or chinese or arabic or urdu or persian) and (display)	61	<u>L5</u>
USPT	11 and (english or french or spanish or japanese or chinese or arabic or urdu or persian) near (display)	0	<u>L4</u>
USPT	11 and (english or french or spanish or japanese or chinese or arabic or urdu or persian) near display	0	<u>L3</u>
USPT	11 and (english or french or spanish or japanese or chinese or arabic or urdu or persian)	72	<u>L2</u>
USPT	(personal or home) near banking	301	<u>L1</u>

5/30.0

WEST

Help

Logout

Main Menu

Search Form

Posting Counts

Show S Numbers

Edit S Numbers

Generate Collection

Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 5485370 A

Entry 1 of 1

File: USPT

Jan 16, 1996

US-PAT-NO: 5485370

DOCUMENT-IDENTIFIER: US 5485370 A

TITLE: Home services delivery system with intelligent terminal emulator

DATE-ISSUED: January 16, 1996

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APPL-NO: 8/ 112178

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PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS The present application is a continuation-in-part (CIP) of: (A) Ser. No. 08/084,319, filed Jun. 30, 1993 abandoned (a file wrapper continuation of Ser. No. 433,825, filed Nov. 9, 1989, abandoned); and (B) Ser. No. 08/104,931, filed Aug. 12, 1993 now U.S. Pat. No. 5,321,840 (a file wrapper continuation of Ser. No. 439,739, filed Nov. 21, 1989 abandoned), which is a continuation-in-part of both Ser. No. 260,832, filed Oct. 21, 1988, now U.S. Pat. No. 5,008,927, and Ser. No. 190,440, filed May 5, 1988, now U.S. Pat. No. 4,991,199. The present application is related to U.S. patent application Ser. No. 593,921, filed Oct. 5, 1990, now U.S. Pat. No. 5,195,130, issued Mar. 16, 1993, which is a continuation-in-part of three prior patent applications, namely, (1) said Ser. No. 260,832, filed Oct. 21, 1988, now U.S. Pat. No. 5,008,927, (2) said Ser. No. 433,825, filed Nov. 9, 1989, and (3) said Ser. No. 439,739, filed Nov. 21, 1989. Said Ser. No. 260,832 is itself a continuation-in-part of said Ser. No. 190,440, filed May 5, 1988, now U.S. Pat. No. 4,991,199. The present application is also related to U.S. Pat. No. Des. 312,457 (Inatomi), which issued from patent application Ser. No. 380,557, filed Jul. 17, 1989. All the foregoing patents and applications, as well as all patents and applications cited herein, are incorporated herein by reference as if reproduced in full below.

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US-CL-CURRENT: 709/217; 379/93.17, 705/39, 709/236

FIELD-OF-SEARCH: 364/DIG.1, 364/DIG.2, 364/408, 379/93, 395/200

REF-CITED:

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ART-UNIT: 236

PRIMARY-EXAMINER: Kriess; Kevin A.

ASSISTANT-EXAMINER: Toplu; Lucien U.

ATTY-AGENT-FIRM: Hogue, Sr.; Dale Curtis Marks & Murase

ABSTRACT:

Systems and methods provide communication between a user-friendly terminal, such as a "home terminal" shaped to resemble a conventional telephone, and a number of service provider computers such as financial institutions. The system's application software transforms simple user commands into commands understood by the service provider computers. The network host computer supplies messages to the terminal for generating prompts needed to solicit required information from the user, and communicates with the service computers according to their respective protocols. The invention provides a packet assembler and disassembler (PAD) element within the home terminal itself, allowing fast response time for the customer at the home terminal while retaining the benefits of data error entry error correction and data transmission error correction.

22 Claims, 19 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 1. Document ID: US 5161231 A

Entry 1 of 1

File: USPT

Nov 3, 1992

US-PAT-NO: 5161231

DOCUMENT-IDENTIFIER: US 5161231 A

TITLE: Processing system which transmits a predetermined error code upon detection of an incorrect transmission code

DATE-ISSUED: November 3, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Iijima; Yasuo	Yokohama	N/A	N/A	JPX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Kabushiki Kaisha Toshiba	Kawasaki	N/A	N/A	JPX	03

APPL-NO: 7/ 667376

DATE FILED: March 12, 1991

PARENT-CASE:

This is a continuation of application Ser. No. 07/361,349, filed on Jun. 5, 1989, which was abandoned upon the filing hereof which is a continuation of Ser. No. 07/097,660 filed Sep. 16, 1987, now abandoned.

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: JP 61-229149

FOREIGN-PRIORITY-APPL-DATE: September 27, 1986

INT-CL: [5] H04L 13/00, G06F 11/00, G06F 11/14

US-CL-ISSUED: 395/800; 364/DIG.1, 364/DIG.2, 364/265, 364/265.1, 364/932.1, 235/380

US-CL-CURRENT: 710/15; 235/380

FIELD-OF-SEARCH: 395/DIG.1, 395/DIG.2, 395/800, 235/380, 235/80, 235/79, 235/487, 235/449, 235/492, 371/33, 371/34, 371/35

REF-CITED:

U.S. PATENT DOCUMENTS

##BEGIN-URPN

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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<u>4707592</u>	November 1987	Ware	235/379
<u>4712214</u>	December 1987	Meltzer et al.	371/32
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FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
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ART-UNIT: 232
 PRIMARY-EXAMINER: Lee; Thomas C.
 ASSISTANT-EXAMINER: Harrell; Robert B.
 ATTY-AGENT-FIRM: Cushman, Darby & Cushman

ABSTRACT:

According to a portable electronic apparatus processing system of this invention, when an IC card receives instruction data, it checks if a function code can be completely input. If the function code is not completely input, the IC card sets data "FF" (hexadecimal code) as the function code, and outputs it to an IC card reader/writer. When the IC card reader/writer outputs an instruction to the IC card, it appends sequential number data to the instruction. The IC card executes processing corresponding to the supplied instruction. When the IC card outputs the processed result to the IC card reader/writer, it appends the sequential number data from the IC card reader/writer to the processed result and outputs it.

6 Claims, 18 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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Document Number 58

Entry 58 of 61

File: USPT

Jul 18, 1995

US-PAT-NO: 5434395

DOCUMENT-IDENTIFIER: US 5434395 A

TITLE: Method and device for effecting a transaction between a first
and at least one second data carrier and carrier used for this purpose
DATE-ISSUED: July 18, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Storck; Jean R.	Mougins	N/A	N/A	FRX
Combaluzier; Pierre M.	Vallauris	N/A	N/A	FRX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Storck; Jean-Rene	N/A	N/A	N/A	N/A	N/A

APPL-NO: 7/ 940876

DATE FILED: December 30, 1992

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: FR 90 05562

FOREIGN-PRIORITY-APPL-DATE: March 5, 1990

PCT-DATA:

PCT-DATE-FILED: May 3, 1990

PCT-APPL-NO: PCT/FR91/00373

PCT-371-DATE: December 30, 1992

PCT-102(E)-DATE: December 30, 1992

PCT-PUB-NO: WO91/17528

PCT-PUB-DATE: November 14, 1991

INT-CL: [6] G06K 5/00

US-CL-ISSUED: 235/380; 235/379, 360/2

US-CL-CURRENT: 235/380; 235/379, 360/2

FIELD-OF-SEARCH: 235/379, 235/380, 235/382, 360/2, 340/825-834

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4277837</u>	July 1981	Stuckert	235/379
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FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY
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OTHER PUBLICATIONS

French Search Report.

ART-UNIT: 254

PRIMARY-EXAMINER: Hajec; Donald

ASSISTANT-EXAMINER: Filipek; Jeffrey R.

ABSTRACT:

A plug-in data carrier includes a processor, a program memory connected to the processor, and a dedicated memory connected to the processor. The dedicated memory is divided into a plurality of regions including a region for controlling and managing the operation of a transaction device, which is a device independent of the plug-in data carrier. The transaction device includes a first contact section which establishes electrical contact with the plug-in data carrier, a second contact section which establishes electrical contact with another data carrier, a first memory section inputting and outputting data to the plug-in data carrier via the first contact section, a second memory section inputting and outputting data to the another data carrier via the second contact section, and an interfacing circuit. The interfacing circuit identifies, under control of the plug-in data carrier, whether the another data carrier is compatible with the plug-in data carrier, and controls data transfer between the plug-in data carrier and the another data carrier via the first and second memory sections under overall control of the plug-in data carrier when the another data carrier is identified as compatible with the plug-in data carrier.

38 Claims, 23 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC

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Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
First Hit		Previous Document		Next Document	
Full	Title	Citation	Front	Review	Classification
Date	Reference	Claims	RWC		

Document Number 58

Entry 58 of 61

File: USPT

Jul 18, 1995

DOCUMENT-IDENTIFIER: US 5434395 A

TITLE: Method and device for effecting a transaction between a first and at least one second data carrier and carrier used for this purpose

BSPR:

In this specification we shall use the term "microcircuit card" in preference to the terms "IC memory card", "smart card", or "microprocessor card" commonly employed to describe the same object. A microcircuit card can be defined, in the most general way, as a portable device for acquiring and storing information and/or data which is endowed with its own intelligence and includes provisions for identification and protection. The cards we are dealing with here are defined, at least as regards their physical format, by the ISO 7810 standard that specifies the physical structure of a type of card, generally referred to as a credit card. Another ISO standard, number 7811, defines, among other things, the position of the magnetic tracks currently employed for cards of a hybrid nature, particularly those intended for banking applications. Pursuant to the recommendations of the French Standardizing Association, AFNOR, ISO issued a "Draft International Standard"--DIS 7016 which not only defines the physical characteristics of the card such as those found in the ISO 7810 standard, but also defines the surface profile of the microcircuit contacts, along with numerous other parameters essentially relating to reliability and physical strength of the microcircuit. This provisional standard also determines the majority of the microcircuit's electrical parameters, notably the signals and protocols used in its dealings with the outside world, initialisation functions, transmission formats and standards, whereas a definitive choice between synchronous and asynchronous transmission has not yet been made.

BSPR:

Full use of the possibilities of the microcircuit card is also being hindered by the type of hardware with which it is currently used, manufacturers offering either hardware that is complex and extremely expensive such as automatic teller machines and their associated servers, or small-size relatively simple equipment for use, for example, as a point of sale terminal. This latter equipment is customized for a specific applications and is completely incapable of following the evolution of the currently available possibilities of the microcircuit card, and even more so future evolutions which are likely to follow an exponential development curve, at least over the next ten years. In brief, the microcircuit card, in its function as a portable data carrier in combination with an excellent level of protection and employed in combination with servers of enormous complexity and high microcircuit card and its inherent intelligence, this cost, operating in relatively unadaptable configurations, does not make use of the present possibilities of the under-utilisation

being likely to become even more pronounced over the next few years.

BSPR:

EP-A-0 049 650 describes a system for distributing objects, such as an automatic teller machine, with means enabling the security of transaction to be improved, through, notably, the simultaneous use of a first portable card means which dialogs with information processing means, and a second portable card means, the latter including enabling functions vis-a-vis the first portable card.

DEPR:

For example, the universal connector shown in FIG. 12 makes it possible to link a microcircuit card fitted into slot 208 to an interactive on-line terminal which itself is linked to a centralized system and from which the card can acquire data, thus, for example, allowing the owner to credit the data memory of card 5 with tokens, such as a certain amount of money, originating from his personal banking account which is consequently debited by the same amount. The reverse operation, in other words crediting an account by debiting the card's data memory can of course also be carried out.

ORPL:

French Search Report.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC
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Next Document

Full Title Citation Front Review Classification Date Reference Claims KMC

Document Number 1

Entry 1 of 1

File: USPT

Feb 22, 2000

US-PAT-NO: 6029147

DOCUMENT-IDENTIFIER: US 6029147 A

TITLE: Method and system for providing an interface for supporting multiple formats for on-line banking services

DATE-ISSUED: February 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Horadan; Peter H.	Kirland	WA	N/A	N/A
Vaughan; Richard A.	Seattle	WA	N/A	N/A
Sewelson; Vivian	Seattle	WA	N/A	N/A
Johnstone; Timothy J.	Snohomish	WA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 818203

DATE FILED: March 14, 1997

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION This application claims the benefit of U.S. Provisional Application Ser. No. 60/013,482 filed Mar. 15, 1996.

INT-CL: [7] G06F 17/60

US-CL-ISSUED: 705/35; 705/1, 705/27, 709/232, 235/379

US-CL-CURRENT: 705/35; 235/379, 705/1, 705/27, 709/232

FIELD-OF-SEARCH: 707/1, 707/27, 707/35, 380/52, 235/379, 709/232

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5218631</u>	June 1993	Katz	463/41
<u>5326959</u>	July 1994	Perazza	235/379
<u>5706442</u>	January 1998	Anderson et al.	707/27
<u>5802307</u>	September 1998	Melo	395/200.62
<u>5815577</u>	September 1998	Clark	380/52

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO
0804030

PUBN-DATE
October 1997

COUNTRY
GB

OTHER PUBLICATIONS

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7, p.38(5) Apr. 1, 1993.

ART-UNIT: 275
PRIMARY-EXAMINER: MacDonald; Allen R.
ASSISTANT-EXAMINER: Irshadullah; M.
ATTY-AGENT-FIRM: Jones & Askew, LLP

ABSTRACT:

In association with a computer system, a method and system for providing an interface for establishing connections with financial institution to utilize on-line services. An application program sends a request to a branding server to look up information related to a particular financial institution. The branding server executes the request and, if the branding server contains information relating to the method of connection with identified financial institution, the branding server sends the information to the application program. The application program then loads an appropriate driver corresponding to the method of connection as determined by the branding server. If the method of connection is open financial connectivity (OFC), then the application loads a flexible driver (the OFC driver) which causes the application program to request the business rules of the particular financial institution from the financial institution's server. The bank server then transmits the business rules to the OFC driver which incorporates the business rules into the application program software and reconfigures the application program to operate according to the business rules.

33 Claims, 5 Drawing figures

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First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC
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Entry 1 of 1

File: USPT

May 30, 1995

DOCUMENT-IDENTIFIER: US 5420405 A

TITLE: Secure, automated transaction system that supports an electronic currency operating in mixed debit & credit modes

ABPL:

This invention describes a combination of methods and apparatus that creates electronic money for personal transactions which integrates the functions of cash, checks and credit cards with constant surveillance against fraud. This money can also serve as an international medium-of-exchange, and support automated sales tax collections and payment. This money's support system is comprised of personal terminals, vendor terminals, an electronic banking sub-system, and homebase terminals. Such a system, if widely used, would increase commercial and personal productivity, provide better security against fraud and counterfeiting, facilitate the automation of operations that involve currency, and sharply diminish the flood of paper that threatens to inundate the present system.

BSPR:

Any true money system must be capable of serving as a national, or international, medium of exchange; it must readily circulate; it must have easily recognized values; it must be transferable in a variety of transactions; its value must be difficult to dilute by counterfeiting; and it must have a guarantor.

BSPR:

The system is easily converted from a national to an international money system through a national code that is stored in the PT indicating its native money denomination. Vendor terminals using currency translators convert each PT's denomination into the local currency and consummate the transaction back through designated VACs and PACs.

DEPR:

In order to handle personal international transactions, currency translator 310 is inserted between number pad 303 and sequence controller 302. The nationality code received from the PT identifies the country of origin of the PT. A key selects the correct currency multiplier stored in translator 310 which converts the vendor's price into the PT's national currency so the transaction within the PT will occur in terms of its currency. The currency translator also generates two transaction packets one in terms of local currency, the second in terms of the PT's currency. The PT's PAC receives the transaction, via the VAC and an international clearinghouse, in terms of the PT's currency. The VAC credits the vendor's account in the local currency. Periodic lump sum settlements, via normal international funds transfer machinery, settle imbalances that develop between VACs of one nationality and PACs of another.

CLPR:

8. A system that conducts and settles personal, international transactions, is comprised of:

CLPV:

vendor account custodian terminal with means for separating out the local currency transaction packet and crediting its amount to the vendor's account and forwarding PT's home currency packet to its designated PAC via an international clearinghouse for debiting.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC

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Document Number 1

Entry 1 of 1

File: USPT

May 30, 1995

DOCUMENT-IDENTIFIER: US 5420405 A

TITLE: Secure, automated transaction system that supports an electronic currency operating in mixed debit & credit modes

BSPR:

This electronic money system has three principal activity areas; point-of-transaction, homebase, and the electronic banking system. The complete system is comprised of six subsystems; 1) personal terminals, PT, 2) vendor terminals, VT, 3) homebase terminals, HBT, 4) personal account custodian, PAC, terminals, 5) vendor account custodian, VAC, terminals, and 6) an electronic clearinghouse. The point-of-sale is where a personal and a vendor terminal, or two personal terminals, initiate the first step of the transaction. Homebase might be a private residence or workplace. The electronic banking system is comprised of PACs, VACs and clearinghouses.

BSPR:

The personal account custodian or PAC terminal includes a crypto entry code decypherer, PT interrogator, account computer, account reconciliation scanner, transaction sequence correlator, and interfaces to HBT telephone and the clearinghouse.

BSPR:

System security is realized by lost & stolen electronic files, cross checks of running account balances, a crypto process for inserting PT credits, and correlations between transaction sequenced numbers and calendar-clock numbers.

BSPR:

Debit transactions are registered in a running account held within the PT. Credit transactions, up to designated limits, are conducted at the option of the payer, by switching from subtraction to addition in a running account.

BSPR:

The availability of zero current drain memory elements known as flash memories or electronically erasable programable read only memories, EEPROMs, make it possible to retain information for long periods without draining the PT's battery. The transaction processors draw current only when a transaction is in process.

BSPR:

The system is easily converted from a national to an international money system through a national code that is stored in the PT indicating its native money denomination. Vendor terminals using currency translators convert each PT's denomination into the local currency and consummate the transaction back through designated VACs and PACs.

DRPR:

FIG. 2a describes a personal terminal (PT) configuration in block diagram.

DRPR:

FIG. 2b shows external details of the PT.

DEPR:

Referring to the drawings, FIGS. 1a and 1b, show the overall electronic money system's operation in pictorial illustrations. The transaction packet, which is also the medium-of-exchange of this system, is created when an individual carrying personal terminal, PT, 101, on their person wishes to conduct a transaction by bringing the PT in proximity with vendor terminal, VT, 102. The amount of the transaction is keyed in by the VT. The amount of the transaction is then debited from the PT's debit or credit account. Information that characterizes the transaction is accumulated in the VT where these characterizations are periodically transferred from the vendor terminal to a vendor's account custodian, 103, or VAC. The VAC credits the vendor's account in the amount of each transaction, and sorts the transactions into like-PAC batches, forwarding them via satellite transponder 104, which performs as a multiple access relay point, communicating with specified PACs in assigned time slots. Personal Account Custodian, or PAC 105, is the place where the PT's account is stored and from which the vendor's account is credited. The satellite serves, for this illustration, as a clearinghouse. (A true clearinghouse can be realized by use of relay ground stations which perform intermediary VAC/PAC sorting.) As a final step in the settlement process, each PAC periodically makes lump sum cash settlements with each VAC to balance all accounts.

DEPR:

The PT's debit and credit account is periodically credited, through homebase terminal, 106. Bill paying transactions occur when a telephone connection between payee and payer is made and amount of the bill is presented and acknowledged. The PT's account is debited by bill payee, 108, who acts as vendor. The payee transfers all accumulated collections to its VAC. The VAC credits payee's account and debits designated PAC accounts.

DEPR:

An individual, wishing to transfer funds from a cash account to his PT, preferably dials his PAC, transmits telephone number and hangs up, then places PT onto HBT interface surface, 106. PAC confirms number and returns call. PAC accesses PT's debit account credit entry port through a crypto gate and proceeds to credit that account with funds debited from a savings account, for example. Acknowledgements are made monthly.

DEPR:

Another type of transaction, referred to as PT/PT, would transfer funds between two individuals. FIG. 1b illustrates how this could take place. Payer 110 presses a button in his PT which steps the number shown on the PT's display to the payment that is to be transferred to recipient 111. The transaction is actuated by debiting the payer's PT account by the displayed amount and simultaneously transferring that amount into PT/PT memories located in the PT, one for crediting the other for debiting. The information stored includes PAC and PIN data lifted from the payer's PT. When the payee's PT is next in contact with its PAC, the stored PT/PT credit information is readout to payee's PAC, 113, where the payee's PT & PAC accounts are credited. The payer's PAC debits payer's PAC account with the amount obtained via satellite, for example, from the payee's debit memory.

DEPR:

FIG. 2a shows a functional block diagram of the preferred embodiment of a personal terminal, PT. It shows antenna 200 which receives and transmits microwave signals to and from receiver/transmitter, or R/T, 201 which operates in a half duplex mode. When R/T 201 is in its receive mode, amplifier 202 draws no current and latch switch, 203 is open, applying no voltage to microprocessor 204 from battery 205. The various functions of microprocessor 204 are indicated by blocks 207 through 213. Block 206 is a transaction sequence controller that triggers the various steps that comprise the transaction. Block 207 is a read-only-memory, or ROM, that contains permanent personal information, such as social security number, date of birth, and sex. It is from this information that a crypto entry code is derived to gain entry to the crediting port of account registers. Block 208 is an erasable-programable-ROM or EPROM which includes semi permanent information such as the personal account custodian's identification number, a nationality code, etc. Block 209 is a temporary memory that stores time and/or point of entry information to facilitate automated toll, mass transit, and parking transactions. Block 210 is where the debit/credit transaction occurs. This block is described in detail by FIG. 2d. Block 211 is the liquid crystal display unit or LCD. It provides running account information, transaction type being conducted, and guidance. Block 212 is a recycling transaction sequence number assignor. It assigns a sequentially advancing number to each transaction. Block 213 is the person-to-person transaction processor described in more detail by FIG. 2e. Block 214 is programable logic that is changed by manually activating push button switches 223, 224, and 225.

DEPR:

FIG. 2b shows a preferred physical embodiment of the PT. The PT is enclosed in plastic case 220. Embedded in the plastic is spiral antenna 221 and liquid crystal display, LCD, 222 which displays running accounts and other transaction related information. Beneath this is optional LCD strip providing advisory operating information. Side buttons 223 and 224 might be used to read in the transaction amount and determine whether the transaction is to be credit or debit. Button 224 might be clicked n times to select the numeral for each decimal position. One click on button 225 could allow completion of the transaction. Two clicks on button 225 could display debit running account, and three clicks display credit running account. The first click on button 223 could turn-on PT. An end-of-transaction signal from the VT would turn-off the PT. Simultaneous pressure on buttons 223 and 225 could make the PT totally unresponsive. Simultaneous pressure on buttons 224 and 225 could activate PT for an automated interrogation. Four clicks on button 225 could configure the PT for a PT/PT transaction. This switching scenario can be simplified by relying more on the VT and verbal commands to set up many transactions.

DEPR:

The input to register 255 can also be changed by switch 257 to conduct a PT-to-PT transaction. Switch 257 is part of ganged switch 260 described in FIG. 2e. LCD 211 gets information from register 255 and from the debit or credit transactions stored in registers 250 and 255.

DEPR:

FIG. 2e illustrates how a person-to-person or PT/PT transaction could be conducted and how block 213 could be configured to support that transaction. When button 225 is clicked four times by both payer and payee, three-pole-single throw switch, 260, is moved from its normal position 2 into position 1. The payer's register 261, which is connected to LCD 211, has the amount of the transaction fed into it by pressing buttons 223 and 224 appropriately. The two PTs involved in the transaction are held in close proximity. The payer clicks

button 225 a fifth time which fires initiator 262. This directs the amount stored in register 261 to be debited from the payer's running account and be fed into the payer's zero current drain debit memory, 263a, also payer's PIN and PAC-IDN is transmitted to the payee's zero current drain credit memory, 263b.

DEPR:

The PT/PT transaction's final step occurs when payee's PT is next in contact with its PAC. Then the crypto credit entry code is determined and the amount stored in the payee's credit memory is credited to payee's PT running account and also to its PAC account. The payer's PIN and PAC-IDN form part of a PT/PT addressed packet directed to the payer's PAC, sent via a PT/PT clearinghouse, where that transaction amount is debited from payer's PAC account.

DEPR:

FIG. 3a illustrates the functions of a typical manned vendor terminal, or MVT. It includes antenna 300, R/T 301, and sequence controller 302. The transaction process begins by selecting from verbal instructions whether the transaction is to be a credit or debit and the amount of the transaction by number pad 303. The proposed transaction would optionally appear on LCD 304 and 304a for viewing by both vendor and customer. Switch 303a initiates the transaction sequence by first activating the transmitter which, in turn, closes latch switch 203 and initiates a PT running account check. (This also triggers a check through lost or stolen file 311.) If the running account check is positive and the customer approves the transaction by clicking button 225, the transaction is consummated by inserting the transaction amount into the appropriate PT register where the new running balance is computed, followed by the transfer of the transaction amount, transaction type, sequential number, customer's PIN, PAC-ID into transaction packet organizing memory 306, where it is combined with time-of-transaction information readout from calendar-clock 307 and vendor's IDN readout from VID-ROM 308a. The transaction amount from number pad 303 and initial running balance from PT are fed into confirm block 305 where the PT's expected new running balance is computed and compared with the PT's actual new running balance as read out of the PT into block 305. If the two new balances are the same, a turn-off opens latch switch 203 and transfers the information stored in memory element 306 into buffer memory 308. The information stored in buffer memory 308 is periodically transferred to the vendor's account custodian, VAC.

DEPR:

The entire transaction can be timed by narrow pulse clock 312, which inserts its pulse train into sequence controller 302. These pulses, used for timing VT/PT transactional bytes, are sent via the transmitter portion of R/T 301. The narrow pulses do not interfere with the data pulses yet are easily handled by the microwave radio link between PT and VT.

DEPR:

In order to handle personal international transactions, currency translator 310 is inserted between number pad 303 and sequence controller 302. The nationality code received from the PT identifies the country of origin of the PT. A key selects the correct currency multiplier stored in translator 310 which converts the vendor's price into the PT's national currency so the transaction within the PT will occur in terms of its currency. The currency translator also generates two transaction packets one in terms of local currency, the second in terms of the PT's currency. The PT's PAC receives the transaction, via the VAC and an international clearinghouse, in terms of the PT's currency. The VAC credits the vendor's account in the local currency. Periodic lump sum settlements, via normal international funds transfer machinery, settle imbalances that

develop between VACs of one nationality and PACs of another.

DEPR:

An automated vendor terminal would include an R/T & sequence controller assemblage, 321, which is similar to that used in the PT. The functions associated with this sequencer include customer presence actuated-switch 322 which starts the transaction by turning on the AVT's transmitter, then turning on the PT and receiving its running debit account balance, PIN, and PAC information, determining that the PT's balance is adequate, feeding in the base price stored in EEPROM 324a which might be modified by price processor 324 prior to being fed through confirm processor 325, where the transaction is confirmed. The transaction packet is assembled and stored in memory, 323. Vendor unit IDN is fed into each packet from VID-ROM 328. Any price qualification information, such as vehicle axle count, would come from an external sensor and be fed into price adjustment processor 324.

DEPR:

FIG. 4a illustrates a homebase terminal, or HBT 401, which is connected to telephone 400. Its operation begins with an individual slipping PT 401 onto the HBT's transaction surface at a homebase location, dialing its PAC, sending the homebase telephone number and PIN, and then hanging up. The PAC terminal checks the phone number as correct for that PT and then redials it. An operator learns from the customer how much funds to transfer into the debit and/or credit accounts from the individual's personal account and then enters those amounts. While this is occurring, the PIN is fed into the encryption generator and the entry crypto code word is read back to the PT. The amount to be credited to each account is read in and confirmed. The individual's personal account, stored in the PAC's computer, is also debited by those same amounts. If the individual wishes to receive a loan for either account, this would also be appropriately registered. Finally the contents of both the person-to-person transaction memories are readout and cleared.

DEPR:

FIG. 4b illustrates circuit details for a preferred HBT modem. The data rates at which the PT normally operates in its transaction mode are much higher than that which can be supported by a phone line circuit. A preferred modulation method for the modem would be a double sideband suppressed carrier, amplitude modulation which is also frequency shift keyed by the presence of 1s or 0s. The sharp cusp created at the nulls of this modulation fires a one-shot multivibrator that generates a narrow pulse which clocks the operation of the PT so it matches that of the HBT telephone line data stream.

DEPR:

To implement this modem, bridged Tee oscillators 410 and 411, set at two separate audio frequencies, are keyed depending on whether a 0 or 1 is present. Bridged Tee amplifiers 412 and 413 amplify one or the other received frequency with each output being detected by oppositely poled diodes 414 and 415. Diodes 416 detect the presence of any signal causing LED 417 to flash as a visual busy signal. When there is no transaction, there are no signals present on the line so LED 417 turns off, and the line is cleared for normal telephone operation. The data output from the receiver port of R/T 409 actuates bridged Tee oscillators 410 and 411, and is fed into phase lock unit 418 to generate a sine wave whose zero crossovers track the input data train. The sine wave is fed to balanced modulator 419. The resulting modulated signal is then fed onto the telephone line via hybrid 420. The output from bridged Tee amplifiers 412 and 413 feed the transmitter port of R/T unit 409, which interacts with the PT lying on the transaction surface of HBT 400. The signals received from the

PT are processed thru TTL/bipolar converter unit 421, whose bipolar output turns on either oscillator 410 or 411. The zero crossover cusp, detected by diodes 422 and 422a, is used to trigger one shot multivibrator 423, which generates a very narrow pulse that is superimposed onto the output of amplifier's 412 and 413.

DEPR:

FIG. 5 describes the operation of a personal account custodian's, or PAC, facility. A principal function of the PAC is to represent the individual customer much as a bank would. It also includes encryption generator 500 which receives PIN information from PTs wishing to credit their running accounts, and through a crypto process derives the unique entry code that has been burned permanently into the PT's crypto ROM when issued. When the entry code, deciphered from the PIN, matches that of the crypto gate, the crediting process proceeds. The crediting process can be conducted at PAC interface 501 on the PAC's premises or through a telephone connection with homebase terminal 502, with the redialing procedure carried out by unit 502a. VAC data is received via interface unit 503.

DEPR:

PT/PT transaction data is similarly taken from a PT via PT/PT interface unit 504a or 504b. The PT's PT/PT memory units are readout into 504a or 504b, one unit storing debits that are subtracted from the designated PAC account, and the second storing credits which are added to its designated account. Those accounts not in this PAC are forwarded to the designated PAC via clearinghouse that is interfaced by 503a.

DEPR:

Six separate processes occur at a PAC terminal. One is crediting PT accounts and debiting of PAC personal accounts. A second is debiting accounts with amounts entered by VACs. (Personal credit and debit accounts are held in account computer 505.) The third process is an account reconciliation conducted by account scanner 506. (Whenever a PT is interrogated its current accounts are routinely readout and compared with the amount held in the corresponding PAC account. When major discrepancies occur, that account is flagged for investigation.)

DEPR:

The fourth process spots potential vendor fraud and counterfeit PTs using clock/transaction-number correlater unit 508 which accumulates each PT's transactions with calendar-clock/transaction-numbers. The unit checks if the order of calendar times tracks transaction-sequence numbers. More specifically, each PT's transactions are collated in order of their numbered sequence. The calendar-clock data, which for example indicates a transaction occurring at 3:05 PM on Jan. 24, 1993 by a numerical tag of 93-1-24-1505 is subtracted from the subsequent numbered transaction and as long as the difference is positive the transactions are considered to be legitimate. This makes it easy to detect an out-of-order time sequence and to identify a suspect vendor or potential counterfeit duplicate PT for further investigation. This process pinpoints potential fraud perpetrators which the double entry reconciliation cannot do. The double entry reconciliation process is the last line of defense against counterfeiting of PTs.

DEPR:

The fifth process is the redialing procedure used to remotely credit a PT via telephone. A preferred redialing procedure includes sending the homebase telephone number to a PAC redialing unit, checking that number with a lookup table that lists approved numbers that any given customer could use in the crediting procedure and then redialing it.

DEPR:

The sixth process concerns local lost, stolen and counterfeit reports which are compiled in buffer memory unit 507 and sent to the VACs for forwarding to vendors. Lost & stolen PTs are reported by their owners to their PAC. These can be distributed via the clearinghouse to all VACs and then to appropriate VTs. Counterfeits are detected and reported by the PACs. If a PAC receives a PIN for which it has no record, that PT is reported as a potential counterfeit. If the counterfeit PT is listed with the addressed PAC, duplicate PTs would show up in the sequence correlator and be reported.

CLPR:

6. A system for detecting and localizing potential vendor fraud and counterfeit PTs, is comprised of:

CLPV:

personal account custodian terminal being comprised of means to receive and store individual transactions, means to debit individual running accounts using said transaction information, means to credit running accounts from cash deposits, means to generate crypto entry codes to gain crediting access to PT's running accounts, means to interact with PT via its homebase terminal, and means for detecting and pinpointing fraud, malfunction or error; and said

CLPV:

homebase terminal being comprised of means for interfacing a telephone line to said PT to provide a convenient entry point into the electronic banking system.

CLPV:

side mounted, button switches that when pressed in specified sequences either inserts a number into said PT's display as a means of entering transaction data, or reprograms PT's internal logic to carry out any one of several transactional sequences, or authorizes consummation of a transaction, or completely deactivates the personal terminal, or displays running accounts.

CLPV:

a personal terminal(PT) and a vendor terminal(VT) are brought in proximity to each other, with either the PT or VT initiating the transaction, said initiation consisting of activating a very low power microwave radio transmitter which latches said PT's microprocessor to internal battery power;

CLPV:

manually or automatically keying in transaction amount; check running account of PT, and if adequate proceed to add or subtract said transaction amount from specified credit or debit running account, transfer new balance to zero current drain memory;

CLPV:

complete point-of-sale transaction by transferring PT's PAC-ID, PIN, and transaction number to VT, then deactivate PT; and

CLPV:

assemble transaction packet in VT by combining PT's PIN, PAC-ID, and transaction number with VT's IDN, calendar-clock byte, and amount and type of transaction.

CLPV:

constructing a security byte by combining the PT's sequential transaction number with the VT's calendar clock number;

CLPV:

debiting both PT and PAC running accounts and periodically comparing

them, and flagging discrepancies; and

CLPV:

correlating flagged items from all PACs to pinpoint and confirm a suspect vendor, counterfeit PT, or equipment malfunction.

CLPV:

a correlator in the PAC terminal that detects when said transaction number sequences for like-PIN packets are out of order when said calendar-clock numerical sequences are in progressing order, or the reverse, logging association VI-ION & PT's PIN.

CLPV:

during next interaction between payee's PT and its PAC, payee's credit memory is readout crediting payee's PT and PAC accounts, said debit memory's information being used to address the PT/PT packet, via PT/PT clearinghouse, to payer's PAC where payer's PAC account is debited by amount expressed in said packet.

CLPV:

personal terminals that include a national currency code stored in its permanent memory to identify the nationality of PT's currency;

CLPV:

means for assembling two transaction packets, one based on local currency and the other on the PT's home currency, and means for forwarding both packets to vendor's VAC; and

CLPV:

vendor account custodian terminal with means for separating out the local currency transaction packet and crediting its amount to the vendor's account and forwarding PT's home currency packet to its designated PAC via an international clearinghouse for debiting.

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Document Number 39

Entry 39 of 61

File: USPT

Nov 17, 1998

US-PAT-NO: 5838812

DOCUMENT-IDENTIFIER: US 5838812 A

TITLE: Tokenless biometric transaction authorization system

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

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APPL-NO: 8/ 687251

DATE FILED: July 25, 1996

PARENT-CASE:

CROSS-REFERENCE This application is continuation of application Ser. No. 08/442,895, filed May 17, 1995, now U.S. Pat. No. 5,613,012, which is a continuation in Part of application Ser. No. 08/345,523, filed Nov. 28, 1994, now U.S. Pat. No. 5,615,277, which are incorporated herein by reference.

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ART-UNIT: 266

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ABSTRACT:

A tokenless identification system and method for authorization of transactions and transmissions is described. The tokenless system and method are principally based on a correlative comparison of a unique biometrics sample, such as a finger print or voice recording, gathered directly from the person of an unknown user, with an authenticated biometrics sample of the same type obtained and stored previously. The method and apparatus can be networked to act as a full or partial intermediary between other independent computer systems, or may be the

sole computer systems carrying out all necessary executions. The method and apparatus further contemplates the use of a private code that is returned to the user after the identification has been complete, authenticating and indicating to the user that the computer system was accessed. The identification system and method of the invention additionally include emergency notification process to permit an authorized user to alert authorities an access attempt is coerced.

19 Claims, 28 Drawing figures

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Document Number 39

Entry 39 of 61

File: USPT

Nov 17, 1998

DOCUMENT-IDENTIFIER: US 5838812 A

TITLE: Tokenless biometric transaction authorization system

BSPR:

Generally, debit cards are used in conjunction with a personal identification code (PIC). Counterfeiting a debit card is more difficult as the criminal must acquire not only the account number, but also the PIC, and then manufacture the card as in the credit card example. However, various strategies have been used to obtain PICs from unwary cardholders; these range from Trojan horse automated teller machines, or ATMs, in shopping malls that dispense cash but record the PIC, to merchant point of sale devices that also record the PIC, to individuals with binoculars that watch cardholders enter PICs at ATMs. The subsequently manufactured counterfeit debit cards are then used in various ATM machines until the unlucky account is emptied.

BSPR:

An example of token-based security system which relies on a biometrics of a user can be found in U.S. Pat. No. 5,280,527 to Gullman et al. In Gullman's system, the user must carry and present a credit card sized token (referred to as a biometrics security apparatus) containing a microchip in which is recorded characteristics of the authorized user's voice. In order to initiate the access procedure, the user must insert the token into a terminal such as an ATM, and then speak into the terminal to provide a biometrics input for comparison with an authenticated input stored in the microchip of the presented token. The process of identity verification is generally not isolated from potential tampering by one attempting unauthorized access. If a match is found, the remote terminal may then signal the host computer that access should be permitted, or may prompt the user for an additional code, such as a PIN (also stored on the token), before sending the necessary verification signal to the host computer.

BSPR:

The invention is clearly advantageous from a convenience standpoint to retailers and financial institutions by making purchases and other financial transactions less cumbersome and more spontaneous. The paper work of financial transactions is significantly reduced as compared to current systems, such as credit card purchase wherein separate receipts are generated for use by the credit card company, the merchant and the consumer. Such electronic transactions also save merchants and banks considerable time and expense by greatly reducing operational costs. Because the system of the invention is designed to provide a consumer with simultaneous direct access to all of his financial accounts, the need for transactions involving money, checks, commercial paper and the like will be greatly reduced, thereby reducing the cost of equipment and staff required to collect

and account for such transactions. Further, the substantial manufacturing and distributing costs of issuing and reissuing credit cards, ATM cards, calling cards and the like will be eliminated, thereby providing further economic savings to merchants, banks, and ultimately to consumers. In fact, the system of the invention will likely spur economic growth since all of a consumer's electronic financial resources will be available at the mere input of his fingerprint or other biometrics.

DRPR:

FIG. 16 is a flow chart of the overall operation of ATM account access execution at the DPC;

DEPR:

As noted, the main objective of this invention is to provide a tokenless, secure, reliable, safe, and consistent, apparatus and method, for identifying individuals for the purpose of performing financial transactions and non-financial transmissions, which can accommodate large numbers of users. It is the essence of this invention that consumers have the ability to conduct these transactions without the use of any tokens, credit cards, badges or identification cards including drivers licenses. In order to be functional it is important that the system operate at speeds required for completing financial transactions such as credit card purchases and ATM services, from multiple banks and credit accounts. The system must be secure, such that individuals records and their biometrics information remain confidential and safe, both within the computer system that identifies the individual and authorizes transactions, or during transfer of data between the computer system and remote sites with which the computer system communicates. Furthermore, the system must be reliable in that errors in identification and authorization must not hamper or make use of the system cumbersome. Since only the use of biometrics are contemplated for identification of individuals, the system must also have security measures to either reduce access, even to the authorized user, or notify authorities in emergency cases. It is appreciated that the system must be able to handle a large number of users, and accommodate storage and transfer of large amounts of data, such as bio-characteristic information, commensurate with speeds at which financial transactions are carried on today.

DEPR:

Turning now to the figures, the overall configuration of the invention and its components are shown in FIG. 1. Essentially a Data Processing Center (DPC) 1 is connected to various terminals 2 through various type of communication means 3 which can be one of several types. The DPC is also connected and communicates with independent computer networks 4. The DPC contains several data bases and software execution modules as shown in FIG. 2. In a preferred embodiment of the invention, the data bases are backed up or "mirrored" for safety reasons. The Firewall Machine 5 is responsible for prevention of electronic intrusion of the system while the Gateway Machine 6 is responsible for carrying out all requests from the user, including adding, deleting and otherwise modifying all data bases. The Gateway Machine is also responsible for decryption and de-packaging of data that has arrived from the terminals using the MACM module 7, MDM module 8, and the SNM module 9. The PGL module 10, and the IML module 11 are used to locate the proper personal identification code and biometrics sample basket. FIG. 3 depicts an example of a terminal and the biometrics input device 12, which has a biometrics scanner 13, data entry means such as a key pad or PIN pad 14, and a display panel 15. The biometrics scanner can be any one of finger print scanner, voice recognition, palm print scanner, retinal scanner or the like, although the fingerprint scanner will be used as an example. The biometrics input device is further equipped with computing modules 16, device drivers, and erasable and non-erasable memory modules. The

biometrics input device communicates with the terminal through preferably a serial port 17. The terminal 2 communicates through a conventional modem 18 with the DPC 1 through request packets 19 and response packets 20 using one of the interconnecting means in FIG. 1 such as cable network, cellular telephone networks, telephone networks, Internet, ATM network, or X.25. FIG. 4 shows a representational diagram of the request packet 19 and its method of generation by the biometrics input device software. FIG. 5 and FIG. 6 show a representational diagram of the request packet and response packet with optional and mandatory data segments. Furthermore, it is shown which parts of the packets are encrypted and which ones are sealed. FIG. 7 is a block diagram of the overall process for data encryption and sealing showing the use of DUKPT key data 20 for encryption of data before appending additional data before sealing the request packet with a Message Authentication Code Key (MAC) 21. FIG. 8 and FIG. 9 show the decryption and encryption process at the DPC. FIG. 12 through 19 and 21 through 22 are block diagrams of selected examples of execution steps carried on at the DPC.

DEPR:

BIA hardware comes in four basic versions: standard, wireless, integrated phone/cable television (or "CATV")/fax, and ATM. Each BIA hardware variant addresses a particular need in the marketplace, and because of the differences in construction, each variant has a different level of security.

DEPR:

BIA software comes in seven basic versions: personal computer (or "PC"), retail, ATM, registration, internal, issuer, and integrated remote. Each software load provides a different, use-specific command set. For instance, the registration software load does not accept requests to form retail transaction messages. Likewise, the retail software command set cannot send individual registration messages. To provide another layer of security, the DPC knows what software package is loaded into each BIA; any attempts by an BIA to send a message that it is normally not able to send is rejected, and treated as a major security violation.

DEPR:

Depending on the task at hand, BIA models are either partially or fully integrated with the terminal. Partially integrated devices are physically separate from the terminal, and they include wireless and standard retail point of sale BIAs. Fully integrated devices are contained within the physical enclosure of the terminal itself, for instance, an ATM, or a telephone.

DEPR:

Has heavy-duty scanner and serial port, along with a multichip module. The fact that the LCD is part of the terminal and not the BIA means lower security because it must reveal the private code to the terminal. Used in ATMs.

DEPR:

Has light-duty scanner, otherwise like ATM. Used in telephones, CATV remotes, and fax machines. Weakest security, both because the LCD and PIC pad are part of the terminal not the BIA, and because of the low-cost nature of the market.

DEPR:

The ATM version of BIA hardware is a multichip module combined with a heavy-duty single-print scanner and a serial port. The components are encased in a tamper-resistant case that makes attempts to penetrate obvious while also providing RF shielding for the contents.

DEPR:

This version is designed to be retrofitted into ATM locations. As such, the scanner pad is a heavy-duty sensor pad, and the entire construction makes use of the existing screens and keypads present in the ATM itself.

DEPR:

Note that since the ATM has no LCD screen or PIC keypad, it really has no need of those device drivers in the mask ROM.

DEPR:

This version is designed to be integrated with telephones, television remote controls, and fax machines. As a result, it makes use of the existing keypads and LCD or television screens to enter or display values. It also uses the communication facilities of the host terminal. For example, the fax machine uses the built-in fax modem and the television remote uses the CATV cable network.

DEPR:

Some commands are not available in some configurations. For instance, the ATM BIA cannot "Get PIC", since there is no attached PIC pad. Instead, the ATM BIA supports a "Set PIC" command.

DEPR:

The Decrypt Response command instructs the BIA to use it's current Response Key to decrypt the encrypted portion of the response message. Once decrypted, the response is returned to the controlling device, presumably for display on the ATM terminal's LED screen.

DEPR:

The BIA/ATM software interface exports a command set that allows ATMs to identify individuals. The following operation is supported:

DEPR:

Integrated BIA/ATM with ATM software load provides biometric-PIC access to ATM cash dispensers.

DEPR:

BIA/catv with Fax software load integrated with a fax machine provides individuals with the ability to send, receive, reject archive, and track secured fax messages.

DEPR:

The Internet Teller Terminal (ITT) is used to identify individuals for internet banking sessions. The DPC, the bank's computer system, and the individual are all connected to the Internet.

DEPR:

A SFT is a fax machine connected to the DPC via a modem. The system treats faxes as just another type of certified electronic mail.

DEPR:

Unsecured faxes are equivalent to a standard fax. The sender enters the phone number of the recipient site, and sends the fax. In this case, the sender remains unidentified, and the fax is sent to a given phone number in the hopes that it will be delivered to the proper recipient. An SFT marks the top line on all such unsecured faxes prominently as being "UNSECURED". All faxes received from non-SFT fax machines are always marked as being unsecured.

DEPR:

In a sender-secured fax, the sender selects the "sender-secured" mode on the fax machine, enters their biometric-PIC followed by their title index code. The fax machine then connects to the DPC, and sends the biometric-PIC information. Once the DPC verifies the individual's identity, the individual then sends the fax by feeding the document

into the fax scanner. In this case, the fax is actually sent to the DPC, which stores the fax digitally. Once the entire fax arrives at the DPC, the DPC commences sending the fax to each destination, labeling each page with the name, title, and company of the sender, along with the banner of "SENDER-SECURED" at the top of each page.

DEPR:

In a secured fax, the sender selects the "secured" mode on the fax machine, enters their biometric-PIC followed by their title index code, and then enters the phone numbers of the recipients. Once the system verifies the sender's identity and each of the recipients phone numbers, the individual then sends the fax by feeding the document into the fax scanner. The fax is then sent to the DPC, which stores the fax digitally. Once the entire fax arrives at the DPC, the DPC sends a small cover page to the destination indicating the pending secured fax, the sender's title and identity, as well as the number of pages waiting, along with a tracking code. This tracking code is automatically entered into the memory of the recipient's fax machine.

DEPR:

To retrieve the fax, any employee of the recipient company can select the "retrieve fax" button on his fax machine, select which pending fax to retrieve by using the tracking code, and then enter biometric-PIC. If the fax is unwanted, the individual may press the "reject fax" button, though he must still identify himself to the system in order to do this. Once validated as a member of the company, the fax is then downloaded to the recipient's fax machine. Each page has "SECURED" on the top of each page, along with the sender's identity and title information.

DEPR:

In a secured-confidential fax, the sender selects the "secured-confidential" mode on the fax machine, enters his biometric-PIC followed by his title and index code, and then enters the phone number and system extension of each recipient. Once the DPC verifies the sender's identity and each of the recipients phone numbers and extensions, the individual then sends the fax by feeding the document into the fax scanner. The fax is sent to the DPC, which stores the fax digitally. Once the entire fax arrives at the DPC, the DPC sends a small cover page to each destination indicating the pending secured- confidential fax, the sender's title and identity, the recipient's title and identity, as well as the number of pages waiting, along with a tracking code. This tracking code is automatically entered into the memory of the recipient's fax. However, the only individual that can retrieve the fax is the individual whose extension code is indicated.

DEPR:

This individual selects the "retrieve fax" button, selects the pending fax to retrieve, and then enters his biometric-PIC. Once validated as the recipient, the fax is then downloaded to the recipient's fax machine. Each page has "SECURED-CONFIDENTIAL" on the top of each page, along with the sender's title and identity information.

DEPR:

Any fax that is sent to the system and then forwarded to the recipient may be sent to any number of recipients without tying up the sending fax machine. Additionally, the tracking number of any fax sent is entered into the memory of the fax machine; a status report on any ongoing fax can be generated at the sending machine by selecting the "status" button and then selecting the particular fax pending tracking code. The DPC issues a report that is immediately sent to the sending fax machine detailing the state of the sending

for each recipient.

DEPR:

The purpose of the biometric ATM is to provide individuals access to cash and other ATM functions without having to use an Interbank card. It does this by submitting a biometric-PIC and an account index code and retrieving a bank account number. For users of the system, this replaces the Interbank card (known in the industry)+PIC mechanism as a method for identifying the account and authorizing the individual. It is assumed that all ATMs still continue to accept Interbank cards.

DEPR:

The ATM consists of:

DEPR:

The biometric ATM uses an integrated BIA/ATM to identify individuals and allow them access to financial assets using a biometric-PIC and an account index. An BIA/ATM is installed into the ATM, making use of the ATM's current PIC pad for PIC and account index code entry. The ATM is connected to the system using X.25 or modem.

DEPR:

The BIA/ATM is structured in such a way as to make integration with an existing ATM network as simple as possible. This results in a compromise between security and ease of integration.

DEPR:

The bank is identified by cross-checking the ATM's stored bank code with the BIA/ATM's bank code. The BIA/ATM is identified by successfully locating the BIA/ATM in the VAD, and the individual is identified through the standard biometric-PIC.

DEPR:

To access an ATM, an individual enters their biometric-PIC into the BIA along with the account index code. The BIA forms an account access request message, which is then sent to the DPC by the ATM. The DPC validates the biometric-PIC as well as the emergency account index code, and then sends the resulting asset account number along with the private code back to the ATM.

DEPR:

The ATM asks the BIA to decrypt the response, and then displays the private code on the ATM's display screen. The ATM also examines the response to see whether or not the individual is performing a standard account access, or a "duress" account access. If a duress account access is indicated, the ATM may provide false or misleading information as to the amounts available to the individual; the specifics of this behavior will vary from ATM to ATM. However, no ATM will ever provide any indication to the individual that a duress transaction is in progress.

DEPR:

Messages between the ATM and the DPC are secured by encryption and MAC calculation from the BIA. The MAC means that the ATM cannot change the contents of the message without being detected, and encryption prevents the encrypted part of the message from being disclosed.

DEPR:

Because the BIA/ATM has no LCD or no PIC pad attached, it requires the ATM to provide all the text prompts and to gather all the input from the individual. This is less secure than if the BIA were performing the operation, but as ATMs are generally physically robust, it can probably be called a wash.

DEPR:

It is between the bank and the individual to specify the behavior of an ATM when the individual indicates he is performing a transaction under duress. A particular bank may choose to limit access, or alter balance information, or a false screen may be displayed. A false screen is a display of data which has been intentionally pre-determined to be inaccurate such that a coercing party will not illegally obtain accurate data about an individual's financial assets. It is beyond the scope of the invention to specify the precise behavior of an ATM under these circumstances.

DEPR:

IBD Machine List: handles the lookup of the main and backup database machines dedicated to holding IBD records for a given PIC group.

DEPR:

When one of the DPC's Firewall Machines receives a packet, it forwards it to one of the GM Machines for the actual processing. Each GM has a Message Processing Module that handles the coordination between the DPC components required to process the request and sends the response back to the sender.

DEPR:

For requests that require the DPC to identify an individual, the DPC executes the following procedure: using the PIC code, the DPC searches the IBD Machine List for the main and backup IBD machines responsible for handling identifications for the given PIC code. Next, the DPC sends the identification request to either the main or backup machines depending on which is the least loaded. The IBD machine responds with the IBD record for the individual or an "individual not found" error.

DEPR:

The IBD machine retrieves all the IBD records for the given PIC. Using a proprietary biometric hardware device, the IBD machine compares each record's primary biometric with the individual's biometric arriving at a comparison score indicating the similarity of the two biometrics. If no biometric has a close enough comparison score, the comparisons are repeated using the secondary biometrics. If none of the secondary biometrics have a close enough comparison score, then the IBD machine returns an "individual not found" error. Otherwise, the IBD machine returns the full IBD record of the individual, from which such fields such as the private code, account numbers, titles, and so on may be obtained.

DEPR:

For requests that include an account index, the DPC handles the case where the individual chooses his or her emergency account index. The GM processing the request immediately notifies the DPC customer support staff, logs a warning, and if the response packet has a reply code, sets it to "emergency". It is the responsibility of the owner of the BIA device that submitted the request to watch for an "emergency" reply code and provide further assistance, such as the false screen mechanism described in the ATM terminal section. The DPC also increments the emergency use count of the individual's IBD record whenever the emergency account index gets accessed.

DEPR:

At any given moment, only one DPC site acts as the registration site, for implementation simplicity. Registration request packets received by non-registration DPC sites are forwarded to the current registration site. The registration DPC site performs the entire registration check, assigning of IBD records to IBD machines, and the distributed transaction required to update all other DPC sites.

DEPR:

The registration DPC site selects the PIC code for registration requests that don't specify one, stores the IBD record on the main and backup IBD machines (as specified in the PIC Group List), and checks the PIC and biometric suitability of the registration packet before running the distributed transaction to update the other DPC sites.

DEPR:

The account access request allows BIA-equipped Automated Teller Machines to provide a safer and more convenient way for individuals to identify themselves to the ATM.

DEPR:

The DPC generates a tracking number for tracking purposes and stores it, the sender's biometric Identification, the security mode, and the message key in a newly created EDD Document record. For each recipient in the recipient list, the DPC also creates a Recipient record. The DPC then waits for the sending fax machine to transmit the fax data encrypted under the message key.

DEPR:

The fax data is sent in a separate step so that if the sender makes a mistake entering his biometric and PIC, the system notifies him before he wastes any time feeding the document into the fax machine.

DEPR:

The Secure Fax Data request allows a secure fax machine to send the fax image to the DPC for delivery to the previously specified recipient(s). This request does not involve any biometric identification and instead relies upon the secret message key to securely transmit the image.

DEPR:

The FW Machines provide a first line of defense against network viruses and computer hackers. All communication links into or out of the DPC site first pass through a secure FW Machine.

DEPR:

The FW Machine, an internet-localnet router, only handles messages destined for the GM Machines.

DEPR:

For DPC to DPC communication, primarily for distributed transactions and sequence number updates, the FW Machines send out double-length DES encrypted packets. The DPC LAN component handles the encryption and decryption: the FWs do not have the ability to decrypt the packets.

DEPR:

A transaction authorization request requires about 400 bytes and registration packets require about 2 KB. To handle 1000 transaction authorizations per second and 1 registration packet per second, the FW Machines are able to process about 400 KB per second (all known in the industry).

DEPR:

The GM Machine (GM), through the FW Machines, link the outside world (BIA-equipped terminals and other DPCs) to the internal components of the DPC. The DPC has multiple GMs, typically two.

DEPR:

The message bandwidth required by the GMs is similar to that required by the FW Machines. A FDDI network interface provides 100 Mbits per

second and easily covers any bandwidth requirements.

DEPR:

The DPC Local Area Network (LAN) links the machines of the DPC sites together using a fiber optic token ring. The fiber optic token ring provides both high bandwidth and good physical security.

DEPR:

The network interfaces used by the machines on the DPC LAN include encryption hardware to make tapping or intercepting packets useless without the encryption key. The encryption key is the same for all machines on the LAN and is stored in the encryption hardware.

DEPR:

The Message Processing Module (MPM) handles the processing for a request packet. It communicates with other components of the DPC as necessary to perform its tasks. The presence of an MPM on a machine brands it as a GM.

DEPR:

The PIC Group List (PGL), in conjunction with the Individual Biometric Database Machine List, defines the configuration of the IBD machines. The PGL stores a list of the PIC groups in the system which is used to simplify the management of the PICs. A PIC group is a set of consecutive PIC codes. A PGL exists on each GM Machine (GM).

DEPR:

When a PIC group splits, the PGL assigns a new main and backup IBD machine based on available storage on a first-come-first serve basis. The PGL coordinates with the IBD machines to first copy the affected records from the old main and backup machines to the new ones, update the IML record, and last remove the old main and backup copies. Splitting a PIC group is an involved task. The PGL batches split requests to be run when the DPC is lightly loaded, for instance, at night.

DEPR:

The system administrator may also change the main and backup IBD machines for a given PIC group if the machines' free storage falls below a level required for handling the expected amount of new registrations.

DEPR:

When PIC groups are added, merged, or split up, the PGL is responsible for informing the IBD Machine List of the changes and for directing the movement of IBD records from one IBD machine to another.

DEPR:

The IBD Machine List (IML), in conjunction with the PIC Group List, codifies the configuration of the IBD machines. The IML maps a PIC code to the main and backup IBD machines storing IBD records for the PIC. The IML is actually keyed by PIC Group (a set of consecutive PIC codes) rather than by individual PICs because this greatly reduces the memory required to store the list. An IML exists on each GM Machine (GM).

DEPR:

When a GM processes a request that requires a biometric identification, the GM finds the IML record keyed by the biometric's PIC group. The GM then knows the main and backup IBD machines to use for the biometric identification.

DEPR:

Any changes in the configuration of the IBD machines are be reflected

in the IML. In addition, the IML uses PIC groups for its keys so when the PIC Group List gets modified, the IML are also updated.

DEPR:

The IBD exists on multiple machines, each of which is responsible for a subset of the IBD records with a copy of each record stored on two different machines, both for redundancy and for load-sharing. The IBD Machine List, stored on the GM, maintains which machines hold which PICs.

DEPR:

Each IBD machine has additional indexes on the individual's Social Security Number, biometric identification code, last name, first name, and phone number to facilitate access to the IBD database.

DEPR:

Each IBD machine has 40 GB of secondary storage provided by one or more RAID devices. Each IBD record is 2658 bytes (assuming the biometrics are 1K apiece) allowing up to 15 million records per machine. The IBD records are stored using a (perhaps clustered) secondary index on the PIC. The index is stored in memory and requires no more than 64 MB (a 64 MB index handles about 16 million entries). To store records for 300 million individuals, the DPC needs at least 40 IBD machines: 20 IBD machines for main storage and another 20 for backup. The number of IBD machines is easily scaled up or down depending on the number of registered individuals.

DEPR:

The IBD machines, PIC Group List, and the IBD Machine List remain up-to-date in terms of which PICs are on which machine. When a PIC group is reconfigured or main and backup machines for PIC groups are changed, the IBD machines update their databases and indexes appropriately.

DEPR:

The PFD record is the same as the IBD record. Fortunately, the DPC needs to store a lot less of them so only two database machines are required to store the entire database, of which one is the backup.

DEPR:

The EDD is flexible enough to allow fax documents to be sent to an individual's e-mail address and e-mail messages sent to a fax machine.

DEPR:

The EDD's storage requirements depend primarily on the number of fax pages it will have to store since e-mail messages are relatively small compared to fax pages. Each fax page requires about 110 KB of storage. Assuming 4 pages per fax, 2 faxes per person per day, and 30 million fax machines, the EDD requires 24 GB of storage to spool one day's worth of faxes.

DEPR:

The backup IBD machine also processes requests doubling effective TPS.

DEPR:

In this case, an ITT communicates with a standard BIA, the DPC, and a bank's internet server to perform routine and nonroutine home banking operations. Note that the DPC isn't involved in actually validating any transactions, but is only responsible for creating a valid set of network credentials and securing the communications line to the bank.

DEPR:

In this case, an ATM communicates with an integrated ATM BIA and the DPC to identify an individual and obtain his bank account number. The individual's account is 2100-0245-3778-1201, bank code is 2100, and the individual's private code is "I am fully persuaded of it."

DEPR:

At this point, the ATM has the account number it needs to continue, so it then retrieves the information associated with the account number, and commences interacting with the individual.

DEPR:

Automated Teller Machinery; uses encoded biometric identity information to obtain access to a financial asset management system, including cash dispensing and account management.

DEPR:

IBD Machine List: a software module in the DPC determines which IBD machines are responsible for which PIN codes.

DEPR:

Internet Teller Terminal; authorizes network terminal session using encrypted credential obtained from DPC using biometric ID.

DEPR:

PIN Group List: a software module in the DPC that is responsible for maintaining the configuration of the IBD machines.

DEPL:

1.1.6. BIA Hardware: ATM Model

DEPL:

1.3.8. BIA Software: ATM Command Set

DEPL:

ATM (Automated Teller Machinery)

DEPL:

ITT (Internet Teller Terminal)

DEPL:

1.4.4. Terminal: Internet Teller Terminal

DEPL:

1.4.11. Terminal: Automated Teller Machinery

DEPL:

1.5.9. Firewall Machine

DEPL:

1.5.10. Gateway Machine

DEPL:

1.5.16. Individual Biometric Database Machine List

DEPL:

1.6.3. Internet Teller Terminal

DEPL:

1.6.10. Automated Teller Machinery

DEPL:

ATM

DEPV:

an Internet Teller software application

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Document Number 37

Entry 37 of 61

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Feb 16, 1999

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TITLE: Display based marketing message control system and method

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APPL-NO: 8/ 556981

DATE FILED: December 13, 1995

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ART-UNIT: 271

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ABSTRACT:

A marketing system for use in a public switched telephone system having stored program controlled switches connected to customer premise equipment having an Analog Display Service Interface, comprises a storage device for storing predetermined information respecting each of customer premise equipment, a device for assembling and managing messages including creating a message to be delivered to one or more of the customer premise equipment, linking each message with one or more of the customer premise equipment, scheduling the delivery of the messages at a predetermined time, and measuring the response of each customer premise equipment to messages delivered thereto.

37 Claims, 108 Drawing figures

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[KMIC](#)

Document Number 37

Entry 37 of 61

File: USPT

Feb 16, 1999

DOCUMENT-IDENTIFIER: US 5873068 A

TITLE: Display based marketing message control system and method

DEPR:

The screens illustrated in FIGS. 11-02 to 11-06 allow the operator to input and edit consumer information. The screen illustrated in FIGS. 11-02 allows the DBM operator to input consumer database information, such as customer name, telephone number, club card membership number, gender, family size, the various age categories of family members, marital status, employment status, level of education, range of family income, number of household members contributing to family income and which bank is used for day to day banking requirements. The screen illustrated in FIG. 11-03 allows the DBM operator to input consumer database information such as dwelling owned or rented, the type of dwelling, source of heat, if customer has pets, listed by number and type, number of automobiles including the year, make, model, and if serviced by dealer, if customer has facsimile machine, voice messaging, photocopier, computer or typewriter. The screen illustrated in FIG. 11-04 allows the DBM operator to input consumer database information such as sports in which household members actively participate, their leisure activities, how much is spent weekly on movies, fast food, dining out, bingo, at the horse races, theatre, on spectator sports and other categories of this nature, membership in clubs or associations, frequency of travel outside of the province, number of hours television viewed per day, radio station listened to and what radio information of greatest interest. The screen illustrated in FIG. 11-05 allows the DMB operator to input consumer database information such as customer ownership of video cassette recorder, microwave, compact disk player, video camera and NINTENDO.RTM. game system or comparable unit, frequency of usage of a pager, cellular phone and banking machine (ABM/ATM), comfortability factor in leaving a message on an answering machine and behaviour when reaching an integrated voice response system. The screen illustrated in FIG. 11-06 allows the DMB operator to input consumer database information such as frequency of playing lotteries, preferred grocery store, number of banks dealt with, number of credit cards including type, acceptance of various promotional mediums, preferred time to review screenTalk messages, which family members view messages, and preferred shopping location for various products and services.

DEPR:

The screens illustrated in FIGS. 11-07 to 11-11 allow the operator to select consumer or target groups of consumers. The screen illustrated in FIG. 11-07 allows DBM operator to select a target consumer or target group of consumers, based on specific consumer information such as customer name, telephone number, club card membership number, gender, family size, the various age categories of family members, marital status, employment status, level of education, range of

family income, number of household members contributing to family income and which bank is used for day to day banking requirements. The screen illustrated in FIG. 11-08 allows the DBM operator to select a target consumer or target group of consumers, based on specific consumer information such as dwelling owned or rented, the type of dwelling, source of heat, whether customer has pets, listed by number and type, number of automobiles including the year, make, model, and whether serviced by dealer, whether customer has a facsimile machine, voice messaging, photocopier, computer or typewriter. The screen illustrated in FIG. 11-09 allows the DBM operator to select a target consumer or target group of consumers based on specific consumer information such as sports in which household members actively participate, their leisure activities, how much is spent weekly on movies, fast food, dining out, bingo, at the horse races, theatre, on spectator sports and other categories of this nature, membership in clubs or associations, frequency of travel outside of the province, number of hours television viewed per day, radio station listened to and what radio information of greatest interest. The screen illustrated in FIG. 11-10 allows the DBM operator to select a target consumer or target group of consumers based on specific consumer information such as customer ownership of video cassette recorder, microwave, compact disk player, video camera and NINTENDO.RTM. game system or comparable unit, frequency of usage of a pager, cellular phone and banking machine (ABM/ATM), comfortability factor in leaving a message on an answering machine, and behaviour when reaching an integrated voiceresponse system. The screen illustrated in FIG. 11-11 allows the DBM operator to select a target consumer or target group of consumers, based on specific consumer information such as frequency of playing lotteries, preferred grocery store, number of banks dealt with, number of credit cards including type, acceptance of various promotional mediums, preferred time to review SCREENTALK.RTM. messages, which family members view messages, and preferred shopping location for various products and services.

DEPR:

The Message Assembly and Delivery System consists of six main software modules created with the SCO UNIX 3.2.2 C Language Development System. With reference to FIG. 19, these modules are the DBM Man Machine Interface module 200, the Message Database module 202, the Scheduler Process module 204, the Refresh Mechanism module 206, the Spooler Process module 208, and the Response Mechanism module 210. These modules are described hereinbelow.

DEPR:

DBM Man Machine Interface Module (MMI)

DEPR:

The DBM control system operator interfaces the system through the Man Machine Interface module 200. The MMI executes when the operator logs in and it allows the operator to create, add and delete DBM message text, test DBM messages with an accompanying screen based test device, assign DBM messages to specific target groups, assign telephone numbers to target groups, schedule DBM messages for delivery at specific hours, review or archive to disk response measurement information, stop or restart Spooler Processes, and review alarm information. FIG. 6-00 illustrates the menu of options provided by the MMI. Target group information, that is an ASCII file of the telephone numbers of the screen based devices to be targeted, is input to the Message Database through the MMI. The source of the ASCII file may be either the TRDB or a database of a retailer/direct marketer. The menu structure of the MMI is illustrated in FIG. 6-01 to 6-12.

DEPR:

The present invention creates a new marketing communication channel allowing tenants of the electronic mall to gain access to consumers with screen based devices and be accessed by consumers with screen based devices. The new marketing communications channel facilitates Display Based Marketing--targeted display based informational, promotional and advertising messages delivered through the public switched telephone network to consumer's unattended screen based devices in a non-intrusive manner; facilitates the CallMall--powerful applications such as home banking, shopping and information services to screen based devices personalized by the consumer; and facilitates Enhanced Telephony Services as defined by Bellcore in FR-NWT-000012 ADSI Specification to screen based devices.

DEPR:

The information services section of the CallMall is intended to provide consumers fast and simple access to information they value but is routine in nature. This would be information like daily weather and weekly winning lotto numbers. This area of the CallMall will also provides access to information exchange that is time consuming and difficult today. This would be things like government vehicle registration. The providers of this information benefit from this area of the CallMall in that they are providing better service to consumers and are reducing their costs of handling these information inquiries. Service is improved due to the ease of access and the richer communication medium (i.e. sight and sound). Cost reductions result from the elimination of live agents answering the inquiry call. They will only get involved if the caller is not satisfied with the information provided in the automated content. The following are potential information services:

DEPR:

The following summarizes the roles and information flows between the system and tenant provided services. CallMall tenants provide their own retail services, with the exception of fax order forms. Most services will be provided on external platforms and will interface to the system as an external telephone number. User interface and program flow are under the direction of the Retailer. The system will call transfer the consumer through the PSTN to one of the store's live agents or their own automated order taking system. Retailer/CallMall tenants receive reports that summarize consumer usage of their mall.

DEPR:

This data structure stores the information pertinent to a retailer's CallMall store. Information required includes: the telephone number that is used to reach off-system retailer applications, a fax telephone number used to forward orders for on-system shopping retailer applications, and a cm.sub.-- store.sub.-- name used to provide the display item entry for the CallMall store on the consumer's display. A language.sub.-- code is used to indicate French or English service. When service in both languages is available, the related.sub.-- cm.sub.-- store.sub.-- no field reflects this.

DEPR:

This data structure is used to allow presentation of catalogs to consumers in their language of choice, by chosen category. A language.sub.-- code and language.sub.-- exclusive.sub.-- flag allow presentation to exclusively French or English consumers, as well as those that have signified their desire to access services in both languages. (See COMMUNITY MALL STORE for more details on language presentation).

DEPR:

Consumers accessing the CallMall will have access to all CallMall stores in their EAS area, sorted by CallMall categories. This data

structure contains an entry for each CallMall store available in the EAS area in the available CallMall categories. Since CallMall stores may be available to consumers in several EAS areas, and CallMall stores may appear in multiple categories, one store may appear in this data structure many times. A language.sub.-- code denotes English or French, and a language.sub.-- exclusive.sub.-- flag is used to denote whether this list of stores should be seen by consumers accepting both English and French stores. The list of stores the consumer sees when accessing the "More Stores" menu item is dependent upon:

DEPR:

This data structure is used to store the valid credit card types that a retailer may choose to utilize. A label in both English and French is provided for consumer presentation.

DEPV:

1. The first option is that when a consumer selects that store in the CallMall, the system will call transfer the consumer through the PSTN to one of the store's live agents or their own automated order taking system.

DETL:

TABLE 2 _____ Areas of Interest
Interest Area Category Type Sub-Category

Interest Area	Category	Type	Sub-Category
			Food & Groceries Food &
Groceries Dairy Food & Groceries Food & Groceries Dry Goods Food &			Groceries Food & Groceries Fruit/Vegetables Food & Groceries Food &
Groceries Health Food Food & Groceries Food & Groceries			Meat/Fish/Poultry Food & Groceries Food & Groceries Package Goods
Food & Groceries Food & Groceries Specialties Dining/Restaurants			Price/Atmosphere Fast Food Dining/Restaurants Price/Atmosphere Casual
Dining Dining/Restaurants Price/Atmosphere Fine Dining			Dining/Restaurants Type of Cuisine Canadian Dining/Restaurants Type
of Cuisine <u>Chinese</u> Dining/Restaurants Type of Cuisine <u>French</u>			Dining/Restaurants Type of Cuisine Greek Dining/Restaurants Type of
Cuisine Italian Dining/Restaurants Type of Cuisine <u>Japanese</u>			Dining/Restaurants Type of Cuisine Seafood Clothing & Accessories Sex
Female Clothing & Accessories Sex Male Clothing & Accessories Age			Newborn(0-6 months) Clothing & Accessories Age Babette(0-1 Year)
Clothing & Accessories Age Infants(0-2 Years) Clothing & Accessories			Age Toddlers(2-3 Yrs) Clothing & Accessories Age Pre-School(4-5 Yrs)
Clothing & Accessories Age School Age(6-12 Yrs) Clothing &			Accessories Age Teenagers(16-18 Yrs) Clothing & Accessories Age
Adult(>18 Years) Clothing & Accessories Type of Clothing Clothing			

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC

Help

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[Previous Document](#)
[Next Document](#)
[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#)

Document Number 31

Entry 31 of 61

File: USPT

Jun 22, 1999

US-PAT-NO: 5915246

DOCUMENT-IDENTIFIER: US 5915246 A

TITLE: Self-service system

DATE-ISSUED: June 22, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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Coutts; Michael G.	Dundee	N/A	N/A	GBX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
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APPL-NO: 8/ 787415

DATE FILED: January 22, 1997

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: GB 9618110

FOREIGN-PRIORITY-APPL-DATE: August 30, 1996

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 705/43; 705/10, 705/14, 705/35, 705/44

US-CL-CURRENT: 705/43; 705/10, 705/14, 705/35, 705/44

FIELD-OF-SEARCH: 705/43, 705/35, 705/39, 705/42, 705/44, 705/8, 705/10, 705/14

REF-CITED:

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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<u>5220501</u>	June 1993	Lawlor et al.	380/24
<u>5237620</u>	August 1993	Deaton et al.	705/10
<u>5389773</u>	February 1995	Coutts et al.	705/43
<u>5482139</u>	January 1996	Rivalto	186/36
<u>5557513</u>	September 1996	Frey et al.	705/8
<u>5642484</u>	June 1997	Harrison, III et al.	705/14
<u>5671331</u>	September 1997	Croley	704/270
<u>5712830</u>	January 1998	Ross et al.	367/93

ART-UNIT: 272

PRIMARY-EXAMINER: Hafiz; Tariq R.
ASSISTANT-EXAMINER: Rhodes; Jason W.
ABSTRACT:

An automated teller machine (10) or a home banking system (32) is operated to provide, during the delays associated with authorizing and acting upon a user instruction, a sales presentation related to a financial product. The type of presentation is selected by matching a profile of the user, obtained from a central information store (20), with profiles of target customers for a number of financial products.

16 Claims, 4 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC

Help	Logout
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[Next Document](#)
[Full](#)
[Title](#)
[Citation](#)
[Front](#)
[Review](#)
[Classification](#)
[Date](#)
[Reference](#)
[Claims](#)
[KMIC](#)

Document Number 31

Entry 31 of 61

File: USPT

Jun 22, 1999

DOCUMENT-IDENTIFIER: US 5915246 A

TITLE: Self-service system

ABPL:

An automated teller machine (10) or a home banking system (32) is operated to provide, during the delays associated with authorizing and acting upon a user instruction, a sales presentation related to a financial product. The type of presentation is selected by matching a profile of the user, obtained from a central information store (20), with profiles of target customers for a number of financial products.

BSPR:

This invention relates to a financial self service system having terminals such as automated teller machines (ATMs) which permit withdrawal of cash, balance inquiry etc. or home banking terminals by which financial transactions and inquiries can be initiated from a user's home or office.

BSPR:

During the operation of an ATM or home banking terminal there are short intervals of time during which the machine is, for example, checking that a PIN (Personal Identification Number) just entered by a user is acceptable, or that the account holder requesting a cash withdrawal or transfer has sufficient funds to cover the amount, or (in the case of an ATM) is counting notes for presentation to the user. During these intervals, which in this specification will be referred to as opportunity intervals, it is known for an ATM to display a short message such as "please wait while your transaction is processed".

BSPR:

In European Patent Application No. 0 645 744 there is disclosed by the present applicant an ATM which operates in a predictive manner, in that when a user enters their card, the machine identifies the user, predicts the transaction most likely to be requested by that user, and presents one or more relevant messages, such as "Do you require .English Pound.20?" or "Do you require a mini statement?", in accordance with that user's habitual transaction request or requests.

DRPR:

FIG. 1 illustrates an ATM system according to the invention;

DRPR:

FIG. 2 illustrates an arrangement for sensing the length of a queue at an ATM;

DRPR:

FIG. 4 illustrates a home banking system according to the invention.

DEPR:

In FIG. 1 an ATM 10 has a conventional display screen 12 and input means 14, such as a key pad and/or touch screen. The ATM 10 is connected to a sales presentation storage means, indicated schematically at 16, capable of storing video/graphics information, such as a compact disc. As is well known, the ATM is connected to a central host computer system 18 running a customer information file 20. A product profile storage means 24 in the form of a database system is connected to a relationship management system 22, which is connected to both the customer information file 20 and the host computer system 18.

DEPR:

The product profile storage means 24 contains information which provides a profile of each type of sales presentation stored in the sales presentation storage means 16, and of the profiles of customers likely to be interested in the related financial product or financial service (hereinafter referred to as "a product". The relationship management system 22 is alerted by the host system 18 to a sales opportunity, i.e. a card inserted in the ATM 10 with a conventional transaction instruction, and requests from the customer information file 20 the details of that cardholder; the management system 22 then attempts to match the customer's profile to one or more product profiles, for example while the ATM is awaiting authorization of the transaction by the host system, and passes an instruction through the host system 18 to the ATM 10, allowing it to utilize the sales presentation storage means 16 in order to provide the appropriate display during one or more opportunity intervals of the ATM transaction.

DEPR:

In the simplest implementation of the invention, a user inserts a card and PIN into the input means 14 and selects a required transaction; the ATM is arranged to provide a message on the display screen 12 indicating that the transaction is being processed, and also calls up from the sales presentation storage means 16 an initial "hook" screen, which provides brief details of a product or service that the financial institution controlling the ATM 10 wishes to sell. The product may be the most recently announced, or most profitable, or popular, product. The presentation will usually be provided while the ATM is counting cash or printing a statement.

DEPR:

In a variation, a user is given the option, by pressing the appropriate key on the input means 14, of asking for more information about the product, either by a further display on the display means 12, or on paper sent by post to the user's home. In the latter case, the user's address may be displayed for confirmation or correction by the user by appropriate key entry. All such interactions are under the control of the ATM's processor.

DEPR:

The duration of the opportunity for a display during a conventional ATM transaction is not great, and complex products may require a substantial time to explain to a user. However, there may be a queue waiting to use the ATM, in which case it is highly preferable if short displays are selected from the sales presentation storage means 16.

DEPR:

The simplest indication of a queue is the rate of insertion of user cards; in a variation of the system the processor of the ATM 10 is programmed to detect the intervals between card insertions; if the

intervals indicate insertion of another card immediately after a transaction is completed, then either short displays will be selected, or no display will be given.

DEPR:

In some transactions, a user inserts the same card twice; for example, if cash is withdrawn, the user may reinsert his or her card to request an up-to-the minute balance figure which takes account of the withdrawal. The ATM processor will also be programmed to sense that the previous card has been presented again, thus overriding the timing information, and also preventing a re-run of a previous sales presentation to the same user.

DEPR:

An alternative queue sensing arrangement is shown in FIG. 2. Adjacent to ATM 10, which is connected as illustrated in FIG. 1, there is a thermal imaging sensor 26 arranged to sense the presence of a queue of people A, B, C. The sensor 26 is connected to the ATM 10 by a secure wire 28, and provides signals indicating the presence or absence of a queue so that the processor of the ATM 10 can arrange for a long or a short sales presentation on the display means or no presentation, as appropriate.

DEPR:

If there are two or more ATMs at a single site, the queue sensing means 26 will be programmed accordingly, or a second sensor etc. will be provided.

DEPR:

In all variations, the ATM with adaptive sales presentation facilities according to the invention will be arranged to balance a high rate of transaction throughput against the opportunity of sales presentation displays.

DEPR:

FIG. 4 shows an embodiment of the invention in a home banking system. The host computer system 18, customer information file 20, relationship management system 22 and product profile storage system 24 are arranged as in FIG. 1.

DEPR:

The user terminal comprises a home banking terminal 32 having a display screen 34 and an input means 36 such as a keyboard. The terminal may be based on a personal computer, or on a terminal as described in the applicant's copending UK patent application No. 9610645.5 filed on May 21, 1996.

DEPR:

The matching of a user profile with a product profile is carried out in the same way as in the FIG. 1 embodiment, and the relationship management system 22 calls up the selected sales presentation from storage means 30 and routes it through the host system 18, modem 42, PSTN 40, and modem 38 to the home banking terminal 32.

DEPR:

In the more relaxed environment of a terminal used in the home or office, it may be possible to display longer sales presentations. However, the user of the home banking terminal will always be presented with the option of terminating a display.

CLPR:

5. An automated teller machine (ATM) connectable to a host system and for allowing an ATM customer to carry out a self-service financial transaction, the ATM comprising:

CLPR:

6. An ATM according to claim 5, wherein the queue sensing unit includes means for detecting radiation reflected by a human being adjacent to the ATM.

CLPR:

7. An ATM according to claim 5, wherein the queue sensing unit includes means for detecting infrared radiation emitted by a human being adjacent to the ATM.

CLPR:

8. An ATM according to claim 5, wherein the queue sensing unit includes means for distinguishing between stationary humans and passers-by relative to the ATM.

CLPR:

9. An automated teller machine (ATM) connectable to a host system and for allowing an ATM customer to carry out a self-service financial transaction, the ATM comprising:

CLPR:

10. An ATM according to claim 9, wherein the queue sensing unit includes means for detecting radiation reflected by a human being adjacent to the ATM.

CLPR:

11. An ATM according to claim 9, wherein the queue sensing unit includes means for detecting infrared radiation emitted by a human being adjacent to the ATM.

CLPR:

12. An ATM according to claim 9, wherein the queue sensing unit includes means for distinguishing between stationary humans and passers-by relative to the ATM.

CLPR:

13. An automated teller machine (ATM) connectable to a host system and for allowing an ATM customer to carry out a self-service financial transaction, the ATM comprising:

CLPR:

14. An ATM according to claim 13, wherein the queue sensing unit includes means for detecting radiation reflected by a human being adjacent to the ATM.

CLPR:

15. An ATM according to claim 13, wherein the queue sensing unit includes means for detecting infrared radiation emitted by a human being adjacent to the ATM.

CLPR:

16. An ATM according to claim 13, wherein the queue sensing unit includes means for distinguishing between stationary humans and passers-by relative to the ATM.

CLPV:

a currency dispenser for dispensing currency to the ATM customer in response to the ATM customer requesting that currency be dispensed during the self-service financial transaction;

CLPV:

an input device for receiving a customer identifying card from the ATM customer to verify identity of the ATM customer;

CLPV:

a display for displaying sales information to be viewed by the ATM customer;

CLPV:

a storage unit for storing a plurality of sales presentations which are viewable by the ATM customer;

CLPV:

a queue sensing unit for sensing a queue of potential ATM customers adjacent to the ATM and providing a signal indicative thereof; and

CLPV:

a controller for (i) selecting one of the plurality of sales presentations based upon identity of the ATM customer and the signal from the queue sensing unit, (ii) controlling operation of the currency dispenser to dispense currency to the ATM customer after identity of the ATM customer has been verified and the ATM customer has requested that currency be dispensed from the currency dispenser, and (iii) controlling the display to display the selected sales presentation to provide sales information to be viewed by the ATM customer while identity of the ATM customer is being verified.

CLPV:

a currency dispenser for dispensing currency to the ATM customer in response to the ATM customer requesting that currency be dispensed during the self-service financial transaction;

CLPV:

an input device for receiving a customer identifying card from the ATM customer to verify identity of the ATM customer;

CLPV:

a display for displaying sales information to be viewed by the ATM customer;

CLPV:

a storage unit for storing a plurality of sales presentations which are viewable by the ATM customer;

CLPV:

a queue sensing unit for sensing a queue of potential ATM customers adjacent to the ATM and providing a signal indicative thereof; and

CLPV:

a controller for (i) selecting one of the plurality of sales presentations based upon identity of the ATM customer and the signal from the queue sensing unit, (ii) controlling operation of the currency dispenser to dispense currency to the ATM customer after identity of the ATM customer has been verified and the ATM customer has requested that currency be dispensed from the currency dispenser, and (iii) controlling the display to display the selected sales presentation to provide sales information to be viewed by the ATM customer while the currency dispenser is counting currency to be dispensed to the ATM customer during the self-service financial transaction.

CLPV:

a receipt printer for printing a receipt containing information relating to the self-service financial transaction to be delivered to the ATM customer after the self-service financial transaction has been carried out;

CLPV:

an input device for receiving a customer identifying card from the ATM customer to verify identity of the ATM customer;

CLPV:

a display for displaying sales information to be viewed by the ATM customer;

CLPV:

a storage unit for storing a plurality of sales presentations which are viewable by the ATM customer;

CLPV:

a queue sensing unit for sensing a queue of potential ATM customers adjacent to the ATM and providing a signal indicative thereof; and

CLPV:

a controller for (i) selecting one of the plurality of sales presentations based upon identity of the ATM customer and the signal from the queue sensing unit, (ii) controlling operation of the receipt printer to print a receipt to be delivered to the ATM customer after the self-service financial transaction has been carried out, and (iii) controlling the display to display the selected sales presentation to provide sales information to be viewed by the ATM customer while the receipt printer is printing the receipt to be delivered to the ATM customer.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC

Help	Logout
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Document Number 21

Entry 21 of 61

File: USPT

Oct 5, 1999

US-PAT-NO: 5963925

DOCUMENT-IDENTIFIER: US 5963925 A

TITLE: Electronic statement presentment system

DATE-ISSUED: October 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kolling; Ray	Menlo Park	CA	N/A	N/A
Occhino; Michael	Castro Valley	CA	N/A	N/A
Roughgarden; Jeffrey D.	Redwood City	CA	N/A	N/A
Hayward; James T.	Shawngigan Lake	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Visa International Service Association	Foster City	CA	N/A	N/A	02

APPL-NO: 8/ 947629

DATE FILED: October 8, 1997

PARENT-CASE:

This application claims priority of provisional U.S. patent application Ser. No. 60/028,095, filed Oct. 9, 1996, entitled "Electronic Statement Presentation", by inventors Kolling, et al., which is hereby incorporated by reference in its entirety for all purposes.

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 705/40; 705/27, 705/34, 705/39, 705/43

US-CL-CURRENT: 705/40; 705/27, 705/34, 705/39, 705/43

FIELD-OF-SEARCH: 705/27, 705/34, 705/40, 705/30, 705/44, 705/39, 705/43, 379/91.01

REF-CITED:

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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ART-UNIT: 275

PRIMARY-EXAMINER: MacDonald; Allen R.

ASSISTANT-EXAMINER: Jeanty; Romain

ATTY-AGENT-FIRM: Beyer & Weaver, LLP

ABSTRACT:

An electronic statement presentment (ESP) system replaces the preparation and mailing of paper statements and invoices from a biller with electronic delivery. Electronic statements have the same look as paper statements as well as including video, audio, graphics, and custom enclosures. Statements are segmented into mandatory and optional components to minimize download time. The ESP system operates independently or is an enhancement to any suitable electronic bill payment system. A central switch computer coordinates template storage, validation, routing and message passing between billers, workstations and consumer financial institutions (CFI). A template authoring workstation (TAWS) creates a template of static biller information to serve as a basis for the electronic statement. The template is stored in a template library at the switch. The switch validates the template by sending it to a template validation workstation (TVAL). Batches of customer statement data are sent from a biller's legacy invoicing system to a statement origination workstation (SORG) along with a template identifier. The switch sends the template to the SORG where the customer data is validated by comparison to the template identified. The batch of customer statement data is sorted by a statement generation workstation (SGEN) identifier associated with each customer record. The sorted batches are sent to the switch where they are routed to the appropriate SGEN based upon the SGEN identifier. Each SGEN generates an electronic statement for each customer from the statement data and the appropriate template. A CFI associated with each SGEN delivers each electronic statement to the appropriate customer using a customer identifier in the statement data and uses any chosen medium.

46 Claims, 20 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC
Help					Logout				

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Generate Collection

Terms	Documents
12 and (atm or automated teller machine)	61

Display 10 Documents

including document number 31

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Main Menu Search Form Posting Counts Show S Numbers Edit S Numbers

Help

Logout

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Previous Document

Next Document

Full Title Citation Front Review Classification Date Reference Claims KMC

Document Number 21

Entry 21 of 61

File: USPT

Oct 5, 1999

DOCUMENT-IDENTIFIER: US 5963925 A

TITLE: Electronic statement presentment system

BSPR:

Billers, who often are billing small amounts with each transaction, incur the costs of processing many checks and the attendant overhead of dealing with paper remittance coupons and envelopes. Given the economy of scale, a biller has great incentive to reduce the cost of remittance processing, and an even larger incentive to reduce the cost of "exception items." An exception item is a payment that, for some reason, cannot be processed according to the highly automated procedures put in place by the biller to quickly process the remittances. Exception items include checks received without payment coupons, payment coupons received without checks, checks for amounts different than the amount shown on the coupon, multiple payments received in an envelope with a single check, etc. Whereas the cost to a biller to process a properly submitted remittance may be \$0.10 per item, an exception item transaction might cost as much as \$0.65 to \$1.50. Billers, therefore, have a large incentive to minimize the number of exception items.

BSPR:

Although the present invention may operate stand-alone, in one embodiment of the invention the electronic statement presentment (ESP) system is an enhancement, or is complimentary to any suitable electronic bill payment system. In one specific embodiment, the ESP system is an enhancement to the electronic bill payment system described in U.S. Pat. No. 5,465,206, and in particular may be integrated with VISA's ePay system to provide full-circle electronic financial transactions for billers and consumers. By introducing electronic statement presentment to an existing electronic bill payment system, an added dimension enables fully automated bill payment. In addition, any suitable electronic remote banking service provided by a financial institution is also enhanced. By integrating the ESP system of the present invention into an electronic bill payment system, a fully electronic payment system is provided that enables processing controls, transaction completion certainty and item resolution. These features are not possible in the traditional paper-based process that uses either the post office or a courier to deliver paper statements.

BSPR:

A bank or other consumer service provider may also integrate such an electronic statement delivery from a biller into its own electronic home banking product in order to enhance that product and to provide more value to its consumer. In this fashion, a consumer may continue a relationship with his current bank, yet still be able to receive electronic statements from any biller from which the consumer receives a service. Alternatively, a consumer may choose any consumer

service provider it desires that might provide electronic statements by way of the present invention. Thus, the present invention enhances the value of the consumer financial institution or consumer service provider in the eyes of the consumer.

BSPR:

The consumer financial institution may then use any of a variety of means to transmit this electronic statement to the consumer. For example, any electronic home banking service that the consumer financial institution supports may be used to transmit the electronic statement to the consumer. Electronic means such as the Internet, telephones, video telephones, televisions, WebTV, personal digital assistants, or any other proprietary communication system may be used. For example, banks such as Bank of America and Citibank have their own proprietary systems for communicating with consumers. The consumer financial institution could even print and deliver the statements if it wished. By allowing a consumer financial institution to use its desired means of communication with a customer, and by integrating the ESP system into this desired means of communication, provides value to the consumer financial institution and to the consumer.

DEPR:

SORG 208 receives template 212 from switch 214 and "validates" statement data 206 with template 212. As will be discussed in greater detail below, this validation can include manual or automated verification of data formats, etc. Once validated, SORG 208 transmits statement data 220 in a standard form 220 to switch 214. For a new template, or when a template is updated, switch 214 transmits template 212 to a statement generation workstation (SGEN) 222. Periodically during a billing cycle, switch 214 routes standard statement data 220 using information contained in the data to SGEN 222. Using template 212 and standard statement data 220, SGEN 222 generates an electronic statement 224 and transmits it to consumer financial institution (CFI) 130. CFI 130 then delivers electronic statement 224 to consumer 140 using the consumer's medium of choice. During operation of ESP system 200, switch 214 receives billing information from a universal biller file (UBF) 300 (described in FIG. 4 below) and distributes information needed to entities within the system.

DEPR:

A template may be produced in a variety of forms desired by the biller. For example, a biller may use one particular template or may have numerous templates for use for different consumers. Different templates may also be used for different times of the year, different geographic regions, differing demographics among customers, etc. A biller may have a template using graphics, and an equivalent template for the same data that uses no graphics. Such a template with no graphics is suitable for the federal government in paying a utility bill, for example, and in particular for the General Services Administration (GSA). Furthermore, a biller may even design a custom template for a large customer that has special needs. Preferably, a template is used at SGEN 22 to generate a statement in a format such as PDF. Any other output data format may also be used such as HTML, ANSI electronic data interchange (EDI) 810 format etc. A biller may also provide a template for special needs such as automated file transfer of invoice data to customer accounts payable systems and automated invoice processing (pre-authorized invoice payment on receipt).

DEPR:

For example, a fixed format invoice, e.g., a mortgage statement, would contain only a fixed number of statement fields, some of which (insurance) might be absent for some invoices. A credit card

statement goes one level of complexity further. It contains a fixed number of statement header fields, some of which might be absent, together with the variable number of detail records containing a fixed number of detail fields, some of which might be absent. A telephone bill can be quite complex. It generally contains statement header fields as well as logical sections for various services, each of which can have its own header and footer. Overlain on this is the possibility of formal sections due to paging. For printed statements, enclosures are typically created as separate documents, and are rarely personalized. Automated mailing equipment is used to insert enclosures into envelopes, often right up to the postal weight limit. Sometimes, statements are batch processed in an order which allows different enclosures to be inserted in different batches.

DEPR:

FIG. 7 is a flowchart 600 describing one embodiment by which a consumer service provider (CSP) is set up for operation within ESP system 200. For simplicity, CSP will be used herein below to represent a consumer financial institution or any other consumer service provider. In step 604 the CSP enrolls as an ESP participant. Similar to step 504, in this step the CSP provides a variety of information to the coordinating entity to identify the CSP and to provide points of contact. In particular, the CSP is assigned an end point, including a CSP identifier and a network mail address. The CSP is also provided with a list of templates of participating billers in the ESP system so that it may advertise these billers to its customers. A set of biller logos are also provided to the CSP for display by their home banking software, or may be found by reference to UBF 300.

DEPR:

Examples of computer-readable media include, but are not limited to: magnetic media such as hard disks, floppy disks, and magnetic tape; optical media such as CD-ROM disks; magneto-optical media such as floptical disks; and hardware devices that are specially configured to store and execute program code, such as ROM and RAM devices. Examples of program code include both machine code, such as produced by a compiler, and files containing higher level code that may be executed by the computer using an interpreter.

ORPL:

"Notice of the Reason for Refusal", Mar. 31, 1998, Japanese Patent Office.

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Document Number 16

Entry 16 of 61

File: USPT

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DOCUMENT-IDENTIFIER: US 5987132 A

TITLE: System, method and article of manufacture for conditionally accepting a payment method utilizing an extensible, flexible architecture

DATE-ISSUED: November 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
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ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
VeriFone, Inc.	Santa Clara	CA	N/A	N/A	02

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ART-UNIT: 362

PRIMARY-EXAMINER: Gregory; Bernarr E.

ATTY-AGENT-FIRM: Warren, Jr.; Sanford E. Chalker; Daniel J. Gardere & Wynne, LLP

ABSTRACT:

An architecture that provides a server that communicates bidirectionally with a gateway over a first communication link, over which service requests flow to the server for one or more merchants and/or consumers is disclosed. Service requests are associated with a particular merchant based on storefront visited by a consumer or credentials presented by a merchant. Service requests result in merchant specific transactions that are transmitted to the gateway for further processing on existing host applications. By presenting the appropriate credentials, the merchant could utilize any other computer attached to the Internet utilizing a SSL or SET protocol to query the vPOS system remotely and obtain capture information, payment administration information, inventory control information, audit information and process customer satisfaction information.

20 Claims, 108 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMMC
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Document Number 16

Entry 16 of 61

File: USPT

Nov 16, 1999

DOCUMENT-IDENTIFIER: US 5987132 A

TITLE: System, method and article of manufacture for conditionally accepting a payment method utilizing an extensible, flexible architecture

BSPR:

Home Banking bill payment services are examples of an EFT system used by individuals to make payments from a home computer. Currently, home banking initiatives have found few customers. Of the banks that have offered services for payments, account transfers and information over the telephone lines using personal computers, less than one percent of the bank's customers are using the service. One reason that Home Banking has not been a successful product is because the customer cannot deposit and withdraw money as needed in this type of system.

BSPR:

Current EFT systems, credit cards, or debit cards, which are used in conjunction with an online system to transfer money between accounts, such as between the account of a merchant and that of a customer, cannot satisfy the need for an automated transaction system providing an ergonomic interface. Examples of EFT systems which provide non-ergonomic interfaces are disclosed in U.S. Pat. Nos. 5,476,259; 5,459,304; 5,452,352; 5,448,045; 5,478,993; 5,455,407; 5,453,601; 5,465,291; and 5,485,510.

BSPR:

To implement an automated, convenient transaction that can dispense some form of economic value, there has been a trend towards off-line payments. For example, numerous ideas have been proposed for some form of "electronic money" that can be used in cashless payment transactions as alternatives to the traditional currency and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059, entitled "MODULAR FUNDS TRANSFER SYSTEM."

DEPR:

Programming languages are beginning to fully support the OOP principles, such as encapsulation, inheritance, polymorphism, and composition-relationship. With the advent of the C++ language, many commercial software developers have embraced OOP. C++ is an OOP language that offers a fast, machine-executable code. Furthermore, C++ is suitable for both commercial-application and systems-programming projects. For now, C++ appears to be the most popular choice among many OOP programmers, but there is a host of other OOP languages, such as Smalltalk, common lisp object system (CLOS), and Eiffel. Additionally, OOP capabilities are being added to more traditional popular computer programming languages such as Pascal.

DEPR:

In the directory structure defined below, documents are stored corresponding to the preferences. The top level of the directory structure is the content-type, the next level is language (for NLS support). For example, to create text/html content in US English & French, the directory structure given below would contain the HTML documents for each of the transactions. The vPOS terminal cartridge has a configuration file that allows the user to specify the content-type as well as the language to be used for a cartridge. The first release of the vPOS terminal cartridge supports one content-type and language for each server.

DEPR:

A Data Manager provides storage and retrieval of generic data items and database records. It is assumed that data fields, index fields or entire data records can be marked as encrypted and the encryption process is largely automated. The data manager has no specific knowledge of database records appropriate to different payment methods. This layer is separated out so as to reduce changes required when new payment methods are introduced. However RSA key pairs and certificates might be considered as "simple" data types. This component also provides an abstraction which supports wallet files on computer disk or contained in smart cards.

DEPV:

The Oracle7 Parallel Server option extends the reliability of applications by transparently harnessing the power of clustered computers in a single logical processing complex that can tolerate individual machine failures.

CLPR:

6. The method as recited in claim 5, wherein said client information is obtained via a telephone, fax machine or electronic mail.

ORPL:

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First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC

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Document Number 14

Entry 14 of 61

File: USPT

Nov 23, 1999

US-PAT-NO: 5990927

DOCUMENT-IDENTIFIER: US 5990927 A

TITLE: Advanced set top terminal for cable television delivery systems
DATE-ISSUED: November 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hendricks; John S.	Potomac	MD	N/A	N/A
Bonner; Alfred E.	Bethesda	MD	N/A	N/A
Wunderlich; Richard E.	Alpharetta	GA	N/A	N/A
Berkobin; Eric C.	Woodstock	GA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Discovery Communications, Inc.	Bethesda	MD	N/A	N/A	02

APPL-NO: 8/ 160194

DATE FILED: December 2, 1993

PARENT-CASE:

RELATED APPLICATIONS This application is a continuation-in-part of application Ser. No. 07/991,074 filed Dec. 9, 1992 entitled TELEVISION PROGRAM PACKAGING AND DELIVERY SYSTEM WITH MENU DRIVEN SUBSCRIBER ACCESS. The following other continuation-in-part applications, also based on the above-referenced patent application, are incorporated herein by reference: Ser. No. 08/160,281, entitled REPROGRAMMABLE TERMINAL FOR SUGGESTING PROGRAMS OFFERED ON A TELEVISION PROGRAM DELIVERY SYSTEM, filed on Dec. 2, 1993; Ser. No. 08/160,280, entitled NETWORK CONTROLLER FOR CABLE TELEVISION DELIVERY SYSTEMS, filed on Dec. 2, 1993; Ser. No. 08/160,282, entitled AN OPERATIONS CENTER FOR A TELEVISION PROGRAM PACKAGING AND DELIVERY SYSTEM, filed on Dec. 2, 1993; Ser. No. 08/160,193, entitled SET TOP TERMINAL FOR CABLE TELEVISION DELIVERY SYSTEMS, filed on Dec. 2, 1993; Ser. No. 08/160,283, entitled DIGITAL CABLE HEADEND FOR CABLE TELEVISION DELIVERY SYSTEM, filed on Dec. 2, 1993.

INT-CL: [6] H04N 7/16

US-CL-ISSUED: 348/6; 348/10, 455/6.2, 455/6.3

US-CL-CURRENT: 348/6; 348/10, 455/6.2, 455/6.3

FIELD-OF-SEARCH: 348/10, 348/11, 348/6, 348/7, 348/12, 348/13, 348/578, 348/584, 348/589, 348/906, 455/5.1, 455/6.1, 455/4.2, 455/6.2, 455/6.3

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ART-UNIT: 271

PRIMARY-EXAMINER: Grant; Chris

ATTY-AGENT-FIRM: Dorsey & Whitney LLP

ABSTRACT:

A novel advanced set top terminal capable of digital decompression, menu generation, interactivity and other advanced functional capabilities for use in a television program delivery system is described. The invention relates to methods and apparatus for upgrading existing set top terminals to provide menu generation capability and advanced functional capabilities. The invention is particularly useful in television program delivery systems with hundreds of channels of programming, providing (i) menu driven program selection through the addition of an upgrade module or menu generation card and (ii) advanced functional capabilities using a set of hardware upgrades and/or an expansion card. Specifically, the invention is an upgradeable system that supports advanced set top functionality through the use of internal software, hardware upgrades, an upgrade module and/or expansion cards. The upgraded hardware generally includes a microprocessor, various input/output ports, processing circuitry and memory. The invention results in an upgraded set top terminal that supports: menu generation; picture-on-picture displays; program catalogue services; interactive services; telephone caller identification; digital audio reception; VCR control; HDTV reception; and backyard satellite system interoperability, among other features and capabilities.

35 Claims, 36 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC
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Document Number 14

Entry 14 of 61

File: USPT

Nov 23, 1999

DOCUMENT-IDENTIFIER: US 5990927 A

TITLE: Advanced set top terminal for cable television delivery systems

BSPR:

The preferred set top terminal may be used to control video tape machines, thereby simplifying the recording of programs. The set top terminal can, in conjunction with the program delivery system, easily support high definition television (HDTV). For subscribers living in remote locations, the set top terminal accommodates backyard satellite systems. In addition to all the features that the set top terminal supports with its current internal programming and upgradeability, additional features may be added or existing features increased through remote reprogramming of the set top terminal 220.

DEPR:

Typically, each video signal is received at the set top terminal 220 along with four audio channels. Two of these audio channels will preferably be used for left and right stereo audio reception of the video signal being displayed. The remaining two audio signals may be used for alternative languages. For example, where a video signal is received by the set top terminal 220, two of the audio channels will provide the stereo audio signals for that video in English, with the other two audio channels providing mono audio signals in French and Spanish. In this way, each video signal received at the set top terminal 220 can accommodate at least two foreign languages. Where stereo audio channels are not desired, the audio channels in English can be set to a single signal, providing mono audio reception, and increasing the multiple language audio channel capability to three foreign languages.

DEPR:

The Level B interactive unit provides the user with access to online data base services for applications such as home shopping, airline reservations, news, financial services, classified advertising, home banking, and interactive teletext services. For example, with this upgrade, a user will be able to reserve plane tickets or buy consumer electronics. The primary feature of this upgrade unit is that it allows actual transactions using two-way communications over modem with outside services. This added two-way communications capability may be with the cable headend 208 or, alternatively, over cellular networks, PCN or other communications media.

DEPR:

The preferred set top terminal 220 may be used to control video tape machines, thereby simplifying the recording of programs. The set top terminal 220 can, in conjunction with the program delivery system, easily support high definition television (HDTV). For subscribers living in remote locations, the set top terminal 220 accommodates

backyard satellite systems.

DEPR:

In this manner the viewer may see the name (and identifying icon graphics) of the person placing the call and can decide whether to activate an automatic telephone message recording system or answer the telephone call. After generating an overlay menu, the set top terminal software awaits an IR command signifying a viewer response. With the simple depression of a button on the remote control, the viewer can instruct the set top terminal to send an activation signal to the automatic telephone message system (through a set top terminal port). Thus, the viewer can continue to watch a program and know the identity of a caller without taking his or her eyes off the television. If a dumb telephone message system is used, the viewer can simply allow the telephone to ring the requisite number of rings until the telephone answering machine normally activates and answers the call.

DEPR:

Referring to FIG. 22, the advanced system of the set top terminal 220 is used to control video tape machines and simplify recording programs using a Guide Record feature. The set top terminal 220 has a separate output 650 for a VCR. Control signals are transmitted through the VCR output of the set top terminal 220 and input to the VCR to allow the VCR to be automatically controlled by the set top terminal 220. Using the set top terminal 220, certain programs are selected by a subscriber from menus, and the VCR will be automatically activated to record the selected program.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
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Document Number 12

Entry 12 of 61

File: USPT

Dec 14, 1999

US-PAT-NO: 6002767

DOCUMENT-IDENTIFIER: US 6002767 A

TITLE: System, method and article of manufacture for a modular gateway server architecture

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kramer; Glenn A.	San Francisco	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Verifone, Inc.	Santa Clara	CA	N/A	N/A	02

APPL-NO: 8/ 668011

DATE FILED: June 17, 1996

INT-CL: [6] H04L 9/00

US-CL-ISSUED: 380/24; 380/9, 380/23, 380/25, 380/49, 705/26, 705/27

US-CL-CURRENT: 705/79; 705/26, 705/27, 713/153

FIELD-OF-SEARCH: 705/26, 705/27, 380/9, 380/23, 380/24, 380/25, 380/49, 380/50, 380/59

REF-CITED:

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ART-UNIT: 362

PRIMARY-EXAMINER: Gregory; Bernarr E.

ATTY-AGENT-FIRM: Warren, Jr.; Sanford E. Chalker; Daniel J. Gardere & Wynne, LLP

ABSTRACT:

Secure transmission of data is provided between a plurality of computer systems over a public communication system, such as the Internet. Secure transmission of data is provided from a customer computer system to a merchant computer system, and for the further secure transmission of payment information regarding a payment instrument from the merchant computer system to a payment gateway computer system. The payment gateway system evaluates the payment information and returns a level of authorization of credit via a secure transmission to the merchant which is communicated to the customer by the merchant. The merchant can then determine whether to accept the payment instrument tendered or deny credit and require another payment instrument. An architecture that provides support for additional message types that are value-added extensions to the SET protocol is provided by a preferred embodiment of the invention. A server communicating bidirectionally with a gateway is disclosed. The server communicates to the gateway over a first communication link, over which all service requests are initiated by the server. The gateway uses a second communication link to send service signals to the server. In response to the service signals, the server initiates transactions to the gateway or presents information on an a display device.

23 Claims, 101 Drawing figures

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Document Number 12

Entry 12 of 61

File: USPT

Dec 14, 1999

DOCUMENT-IDENTIFIER: US 6002767 A

TITLE: System, method and article of manufacture for a modular gateway server architecture

BSPR:

Home Banking bill payment services are examples of an EFT system used by individuals to make payments from a home computer. Currently, home banking initiatives have found few customers. Of the banks that have offered services for payments, account transfers and information over the telephone lines using personal computers, less than one percent of the bank's customers are using the service. One reason that Home Banking has not been a successful product is because the customer cannot deposit and withdraw money as needed in this type of system.

BSPR:

Current EFT systems, credit cards, or debit cards, which are used in conjunction with an on-line system to transfer money between accounts, such as between the account of a merchant and that of a customer, cannot satisfy the need for an automated transaction system providing an ergonomic interface. Examples of EFT systems which provide non-ergonomic interfaces are disclosed in U.S. Pat. Nos. 5,476,259; 5,459,304; 5,452,352; 5,448,045; 5,478,993; 5,455,407; 5,453,601; 5,465,291; and 5,485,510.

BSPR:

To implement an automated, convenient transaction that can dispense some form of economic value, there has been a trend towards off-line payments. For example, numerous ideas have been proposed for some form of "electronic money" that can be used in cashless payment transactions as alternatives to the traditional currency and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059, entitled "MODULAR FUNDS TRANSFER SYSTEM."

DEPR:

Programming languages are beginning to fully support the OOP principles, such as encapsulation, inheritance, polymorphism, and composition-relationship. With the advent of the C++ language, many commercial software developers have embraced OOP. C++ is an OOP language that offers a fast, machine-executable code. Furthermore, C++ is suitable for both commercial-application and systems-programming projects. For now, C++ appears to be the most popular choice among many OOP programmers, but there is a host of other OOP languages, such as Smalltalk, common lisp object system (CLOS), and Eiffel. Additionally, OOP capabilities are being added to more traditional popular computer programming languages such as Pascal.

DEPR:

In the directory structure defined below, documents are stored corresponding to the preferences. The top level of the directory structure is the content-type, the next level is language (for NLS support). For example, to create text/html content in U.S. English & French, the directory structure given below would contain the HTML documents for each of the transactions. The vPOS terminal cartridge has a configuration file that allows the user to specify the content-type as well as the language to be used for a cartridge. The first release of the vPOS terminal cartridge supports one content-type and language for each server.

DEPR:

A Data Manager provides storage and retrieval of generic data items and database records. It is assumed that data fields, index fields or entire data records can be marked as encrypted and the encryption process is largely automated. The data manager has no specific knowledge of database records appropriate to different payment methods. This layer is separated out so as to reduce changes required when new payment methods are introduced. However RSA key pairs and certificates might be considered as "simple" data types. This component also provides an abstraction which supports wallet files on computer disk or contained in smart cards.

DEPV:

The Oracle7 Parallel Server option extends the reliability of applications by transparently harnessing the power of clustered computers in a single logical processing complex that can tolerate individual machine failures.

ORPL:

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ORPL:

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ORPL:

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Business Wire, RSA Data Security, Inc. Establishes Japanese Subsidiary Company to Market RSA Encryption Technology to Developers in Japan, Feb. 8, 1996, pp. 7-8.

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Document Number 10

Entry 10 of 61

File: USPT

Jan 4, 2000

US-PAT-NO: 6012050

DOCUMENT-IDENTIFIER: US 6012050 A

TITLE: Multi-transaction service system

DATE-ISSUED: January 4, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Eaton; Morag M.	Fife	N/A	N/A	GBX
Horn; David	Kircaldy	N/A	N/A	GBX
Cranston; Ian A.	Edinburgh	N/A	N/A	GBX
Ambler; Stephen	Edinburgh	N/A	N/A	GBX
Shanker; Veerasamy S.	Edinburgh	N/A	N/A	GBX
Jorgensen; Steen	Oslo	N/A	N/A	NOX
Riach; David J. A.	Edinburgh	N/A	N/A	GBX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
NCR Corporation	Dayton	OH	N/A	N/A	02

APPL-NO: 9/ 176510

DATE FILED: October 21, 1998

PARENT-CASE:

This application is a continuation in part of Ser. No. 08/886,485, filed Jul. 1, 1997.

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: GB 9624894

FOREIGN-PRIORITY-APPL-DATE: November 29, 1996

INT-CL: [6] G06F 19/00

US-CL-ISSUED: 705/42; 705/17, 705/26, 705/43

US-CL-CURRENT: 705/42; 705/17, 705/26, 705/43

FIELD-OF-SEARCH: 705/17, 705/26, 705/42, 705/43, 235/379, 235/380, 235/381, 395/200.31, 395/200.32, 395/200.33, 395/200.47, 395/200.48, 395/200.5

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5239480</u>	August 1993	Huegel	705/5
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ART-UNIT: 271

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ASSISTANT-EXAMINER: Hayes; John W.

ATTY-AGENT-FIRM: Gates; George H.

ABSTRACT:

A customer (80) can request and receive a financial service through any of a number of channels (82,83,84,85,86,87), each connected to channel-specific hardware, respectively a digital telephone (92), an ATM (93), a branch office (94), a branch sales office (99), a self service sales terminal (95), a home banking PC (96) and an interactive television (97). Each service channel is connected through an integrated channel manager (100) to business operations means including a transaction processing host computer (112), a cheque processor (113), a relationship database manager (114), a financial call center (115), and an external financial database (111). The ICM 100 provides interfaces for each channel and each business operation means so far as the channel-specific and business operation-specific aspects are concerned, and also runs a number of business application services (142, 144, 146, 148), such as a balance inquiry service, which can interface with any channel and any business operation means independently of any channel-specific or operation-specific requirements.

32 Claims, 5 Drawing figures

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[Next Document](#)
[Full](#)
[Title](#)
[Citation](#)
[Front](#)
[Review](#)
[Classification](#)
[Date](#)
[Reference](#)
[Claims](#)
[KMC](#)

Document Number 10

Entry 10 of 61

File: USPT

Jan 4, 2000

DOCUMENT-IDENTIFIER: US 6012050 A

TITLE: Multi-transaction service system

ABPL:

A customer (80) can request and receive a financial service through any of a number of channels (82,83,84,85,86,87), each connected to channel-specific hardware, respectively a digital telephone (92), an ATM (93), a branch office (94), a branch sales office (99), a self service sales terminal (95), a home banking PC (96) and an interactive television (97). Each service channel is connected through an integrated channel manager (100) to business operations means including a transaction processing host computer (112), a cheque processor (113), a relationship database manager (114), a financial call center (115), and an external financial database (111). The ICM 100 provides interfaces for each channel and each business operation means so far as the channel-specific and business operation-specific aspects are concerned, and also runs a number of business application services (142, 144, 146, 148), such as a balance inquiry service, which can interface with any channel and any business operation means independently of any channel-specific or operation-specific requirements.

BSPR:

In a multi-transaction financial services systems, a wide range of financial services is available through a variety of different delivery channels. Examples include a telephone call to a financial institution such as a Bank to inquire about a customer balance; a withdrawal of cash from an Automated Teller Machine (ATM), and use of electronic point of sale (POS) equipment. Each service is provided by service-specific hardware and software, i.e. a service-specific delivery channel, and each channel requires a specific connection to each possible host.

DEPR:

In Channel 30 a customer 32 visits a self-service financial terminal such as an ATM 34. The ATM is connected by a server 36 to a local database 38 arranged to authorize and control a transaction such as a request to withdraw cash. The transaction details are sent to the data host 70 by a data link 39. In channel 40 a customer 42 uses a digital telephone (or touch-tone telephone) 44 and the public switched telephone network (PSTN) 45 to initiate a transaction, such as a balance inquiry or transfer of funds between accounts; the transaction can be based on a voice prompt system, with the customer 42 keying in the appropriate response by number on the telephone 44. The PSTN 45 connects through a server 46 to a local database 48 arranged to authorize and control the transaction, and the details are sent to the data host 70 by a data link 49. Channel 50 is similar, but the customer 52 uses a home computer 54 to connect to a server 56, which is connected to the local database 48, and by a

datalink 59 to the data host 70.

DEPR:

For example the local databases 38, 48, 68, supply the data host 70 only with relevant information. The database 68 associated with the POS channel 60 may record the information "Mr. Smith ordered a washing machine costing .English Pound.1,000", but it will send to the data host 70 "Debit Mr. Smith's account by .English Pound.1,000". The detailed customer information has been lost, and there is no means within the system for recognizing that Mr. Smith may require insurance for the washing machine and therefore the opportunity of offering him this financial service has been lost.

DEPR:

In the integrated financial services system according to the invention, shown in FIG. 2, a customer 80 interacts by channels 82, 83, 84, 85, 86, 87 with a number of services. Some of the services shown are identical to those in FIG. 1, e.g. channel 82 allows a digital telephone 92 to be used for a balance inquiry or an account-to-account transfer of funds; channel 83 provides a service through an ATM 93; channel 84 indicates a visit by the customer to bank premises 94; and channel 86 shows the use of a home banking system running on a PC 96.

DEPR:

Three channels are additional to those shown in FIG. 1; channel 85 shows an automated sales terminal 95, which can be arranged to sell tickets for travel or entertainment or insurance or the like on a self service basis; channel 87 provides an interactive service by means of a television receiver 97; an additional facility is the opportunity for branch sales 99, such as the offer to the customer 80 of a financial service or product such as insurance from the local bank branch.

DEPR:

The arrangement of the ICM 100 is shown in highly schematic form in FIG. 3. The ICM can be regarded as having three layers; a first outer layer 120 has a number of service channel interfaces 122, 124, 126 etc., one for each customer service channel, such as connection to the ATM 93 or the home computer 96. A second outer layer 130 has a number of business operation interfaces 132, 134, 136 etc., one for each business operation means, such as connection to the transaction processing host computer 112 or the cheque processor 113.

DEPR:

For example, suppose business application function 144 is a balance inquiry. This can be initiated from ATM 93 or a computer 96 through the interfaces 124 or 126 respectively, and the data needed to answer the inquiry resides on the host computer 112 connected through the interface 134.

DEPR:

The ICM 100 routes a balance inquiry from either the ATM 93 or the home computer 96 to the balance inquiry function 144 as shown by the arrows A, B and connects the function 144 to the host computer 112 as shown by arrow C. The balance information is returned through the reverse route.

DEPR:

The financial services provided by the system of FIG. 2 can now be regarded as service oriented, rather than channel oriented as in the prior art. For example, if the customer 80 requires a cash withdrawal, the ICM 100 regards this as "a cash withdrawal service", which may be initiated by an ATM 93 or at a bank branch 94 etc.; in the prior art arrangement there would have been "an ATM service" or

"a bank branch service".

DEPR:

The provision of the integrated channel manager 100 in effect draws together all the disparate sources of customer contact and information in a financial services environment. Information about a customer 80 is connected through all of the channels 82-87, and is made available by the ICM 100 to all of the business service operation means 111-115. The business services therefore have access to the customers contact history (e.g. the customer's entire use of ATMs, home banking systems, visits to a bank branch etc. which were previously logged only on a channel-specific basis); customer contact management (e.g. use of the collected customer history to offer services); and customer complaint handling (has the customer made a complaint? How was it handled? In what circumstances is it likely to recur?). The information can be used to provide targeted marketing through any channel the customer uses to access a service, i.e. the customer can be provided with details of financial products and services most likely to be attractive to the customer, given the customers' financial background and habits.

DEPR:

The separation of business functionality from delivery channels can be applied in systems other than financial service systems. The invention can also be applied in the retail system, in which the customer service channels will include a Point Of Sale till, an automatic vending machine, and a loyalty card processing terminal, and the operation means will include a relationship manager to provide a base for customer services such as special offers, posting of coupons to selected addresses etc. Also, in a communications system, the customer service channels will include conventional telephone, cable television and interactive television facilities.

CLPR:

4. A multi-transaction services system according to claim 2, wherein the financial service channels comprise at least one of an automated teller machine, a self service sales terminal, a home banking system, a digital telephone connection, a financial services branch office, a financial branch sales office, and an interactive television system.

CLPR:

20. A method of providing multi-transaction services according to claim 18, wherein the financial service channels comprise at least one of an automated teller machine, a self service sales terminal, a home banking system, a digital telephone connection, a financial services branch office, a financial branch sales office, and an interactive television system.

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[Classification](#)
[Date](#)
[Reference](#)
[Claims](#)
[KMC](#)

Document Number 9

Entry 9 of 61

File: USPT

Jan 18, 2000

US-PAT-NO: 6016484

DOCUMENT-IDENTIFIER: US 6016484 A

TITLE: System, method and article of manufacture for network electronic payment instrument and certification of payment and credit collection utilizing a payment

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

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APPL-NO: 8/ 639880

DATE FILED: April 26, 1996

INT-CL: [6] G06F 17/60

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ART-UNIT: 271

PRIMARY-EXAMINER: Cosimano; Edward R.

ATTY-AGENT-FIRM: Gardere & Wynne, L.L.P. Warren, Jr.; Sanford E. Chalker; Daniel J.

ABSTRACT:

An electronic monetary system provides for transactions utilizing an electronic-monetary system that emulates a wallet or a purse that is customarily used for keeping money, credit cards and other forms of payment organized. Access to the instruments in the wallet or purse is restricted by a password to avoid unauthorized payments. A certificate form must be completed in order to obtain an instrument. The certificate form obtains the information necessary for creating a certificate granting authority to utilize an instrument, a payment holder and a complete electronic wallet. Electronic approval results in the generation of an electronic transaction to complete the order. If a user selects a particular certificate, a particular payment instrument holder will be generated based on the selected certificate. In addition, a default bitmap for the instrument associated with a particular certificate is defined by the issuing agent for the certificate, and the default bitmap will be displayed when the certificate definition is completed. Finally, the number associated with a particular certificate will be utilized to determine if a certificate can be issued by a particular party.

21 Claims, 35 Drawing figures

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Document Number 9

Entry 9 of 61

File: USPT

Jan 18, 2000

DOCUMENT-IDENTIFIER: US 6016484 A

TITLE: System, method and article of manufacture for network electronic payment instrument and certification of payment and credit collection utilizing a payment

BSPR:

The Automated Clearing House (ACH) where a user can enter a pre-authorized code and download information with billing occurring later, and a Point Of Sale (POS) system where a transaction is processed by connecting with a central computer for authorization for the transaction granted or denied immediately are examples of EFT systems that are utilized by retail and commercial organizations. However, the payments made through these types of EFT systems are limited in that they cannot be performed without the banking system. Moreover, ACH transactions usually cannot be performed during off business hours.

BSPR:

Home Banking bill payment services are examples of an EFT system used by individuals to make payments from a home computer. Currently, home banking initiatives have found few customers. Of the banks that have offered services for payments, account transfers and information over the telephone lines using personal computers, less than one percent of the bank's customers are using the service. One reason that Home Banking has not been a successful product is because the customer cannot deposit and withdraw money as needed in this type of system.

BSPR:

Current EFT systems, credit cards, or debit cards, which are used in conjunction with an on-line system to transfer money between accounts, such as between the account of a merchant and that of a customer, cannot satisfy the need for an automated transaction system providing an ergonomic interface. Examples of EFT systems which provide non-ergonomic interfaces are disclosed in U.S. Pat. Nos. 5,476,259; 5,459,304; 5,452,352; 5,448,045; 5,478,993; 5,455,407; 5,453,601; 5,465,291; and 5,485,510.

BSPR:

To implement an automated, convenient transaction that can dispense some form of economic value, there has been a trend towards off-line payments. For example, numerous ideas have been proposed for some form of "electronic money" that can be used in cashless payment transactions as alternatives to the traditional currency and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059, entitled "MODULAR FUNDS TRANSFER SYSTEM."

DEPR:

Programming languages are beginning to fully support the OOP

principles, such as encapsulation, inheritance, polymorphism, and composition-relationship. With the advent of the C++ language, many commercial software developers have embraced OOP. C++ is an OOP language that offers a fast, machine-executable code. Furthermore, C++ is suitable for both commercial-application and systems-programming projects. For now, C++ appears to be the most popular choice among many OOP programmers, but there is a host of other OOP languages, such as Smalltalk, common lisp object system (CLOS), and Eiffel. Additionally, OOP capabilities are being added to more traditional popular computer programming languages such as Pascal.

DEPR:

A Data Manager provides storage and retrieval of generic data items and database records. It is assumed that data fields, index fields or entire data records can be marked as encrypted and the encryption process is largely automated. The data manager has no specific knowledge of database records appropriate to different payment methods. This layer is separated out so as to reduce changes required when new payment methods are introduced. However RSA key pairs and certificates might be considered as "simple" data types. This component also provides an abstraction which supports wallet files on computer disk or contained in smart cards.

DEPR:

There are various requirements that a consumer demands of a paywindow application, such as, support for a particular target hardware platform, secure communication of payment information on the public network, easy configuration and accessibility, simplified order entry and transaction completion, store payment instrument information safely and securely, provide a wide variety of payment instruments, retain URLs of consumer's favorite shops, launch browser from the payment window to visit shops, keep records and export records for transaction data, provide shopping assistance, support multiple users with a single application, display merchant certificate and payment forms that are acceptable to a particular merchant, manage digital credentials, provide multiple accounts for a single payment type, provide support for merchant value add or loyalty programs and the support must be portable to another client machine.

DEPR:

A merchant has a different set of requirements for a payment application which include: consistent information format; loyalty and branding opportunities; multiple payment types for a consumer to select from; tight integration with a merchant store; links from the system to the merchant's store, better risk management/rates utilizing the system. A link could be a hypertext connection between two displays, a point-to-point connection between areas in a single display, a Uniform Resource Locator (URL), an index, a reference to an address or other means which facilitates transfer of control from one area of execution to another area of execution (across machines, network locations or even satellite linkages and microwave transmissions).

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Document Number 8

Entry 8 of 61

File: USPT

Feb 15, 2000

US-PAT-NO: 6026379

DOCUMENT-IDENTIFIER: US 6026379 A

TITLE: System, method and article of manufacture for managing transactions in a high availability system

DATE-ISSUED: February 15, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Haller; Daniel R.	Menlo Park	CA	N/A	N/A
Nguyen; Trong	Sunnyvale	CA	N/A	N/A
Rowney; Kevin T. B.	San Francisco	CA	N/A	N/A
Berger; David A.	San Mateo	CA	N/A	N/A
Kramer; Glenn A.	San Francisco	CA	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
VeriFone, Inc.	Santa Clara	CA	N/A	N/A	02

APPL-NO: 8/ 664634

DATE FILED: June 17, 1996

INT-CL: [7] H04N 1/413

US-CL-ISSUED: 705/34; 705/26, 705/27, 705/39

US-CL-CURRENT: 705/34; 705/26, 705/27, 705/39

FIELD-OF-SEARCH: 705/26, 705/27, 705/39, 705/44, 705/34

REF-CITED:

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ART-UNIT: 274

PRIMARY-EXAMINER: Peeso; Thomas R.

ATTY-AGENT-FIRM: Gardere & Wynne, L.L.P. Warren, Jr.; Sanford E. Chalker; Daniel J.

ABSTRACT:

An architecture is disclosed allowing a server to communicate bidirectionally with a gateway over a first communication link, over which service requests are initiated by the server. In response to a transaction received from a host legacy system at the gateway, the gateway parses one or more transaction response values from the host message, maps the one or more transaction response values to a canonical response code, and stores the canonical response code in a transaction log. According to a broad aspect of a preferred embodiment of the invention, communication networks that employ transactions between applications must effectively manage transactions that flow over the network. In addition, networking systems must also detect counterfeit transactions, especially, when the networking systems are utilized for financial transactions. An active, on-line database is utilized as a transaction log to track original requests, valid retries and detect fraudulent transactions. The transaction log serves as a memory cache where the received host response is returned to a valid retry transaction should the original response fail to reach a server because of a communications problem.

25 Claims, 106 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RWMC
Help					Logout				

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Document Number 8

Entry 8 of 61

File: USPT

Feb 15, 2000

DOCUMENT-IDENTIFIER: US 6026379 A

TITLE: System, method and article of manufacture for managing transactions in a high availability system

BSPR:

The Automated Clearing House ("ACH") where a user can enter a pre-authorized code and download information with billing occurring later, and a Point Of Sale (POS) system where a transaction is processed by connecting with a central computer for authorization for the transaction granted or denied immediately are examples of EFT systems that are utilized by retail and commercial organizations. However, the payments made through these types of EFT systems are limited in that they cannot be performed without the banking system. Moreover, ACH transactions usually cannot be performed during off business hours.

BSPR:

Home Banking bill payment services are examples of an EFT system used by individuals to make payments from a home computer. Currently, home banking initiatives have found few customers. Of the banks that have offered services for payments, account transfers and information over the telephone lines using personal computers, less than one percent of the bank's customers are using the service. One reason that Home Banking has not been a successful product is because the customer cannot deposit and withdraw money as needed in this type of system.

BSPR:

Current EFT systems, credit cards, or debit cards, which are used in conjunction with an on-line system to transfer money between accounts, such as between the account of a merchant and that of a customer, cannot satisfy the need for an automated transaction system providing an ergonomic interface. Examples of EFT systems which provide non-ergonomic interfaces are disclosed in U.S. Pat. Nos. 5,476,259; 5,459,304; 5,452,352; 5,448,045; 5,478,993; 5,455,407; 5,453,601; 5,465,291; and 5,485,510.

BSPR:

To implement an automated, convenient transaction that can dispense some form of economic value, there has been a trend towards off-line payments. For example, numerous ideas have been proposed for some form of "electronic money" that can be used in cashless payment transactions as alternatives to the traditional currency and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059, entitled "MODULAR FUNDS TRANSFER SYSTEM."

DEPR:

Programming languages are beginning to fully support the OOP principles, such as encapsulation, inheritance, polymorphism, and

composition-relationship. With the advent of the C++ language, many commercial software developers have embraced OOP. C++ is an OOP language that offers a fast, machine-executable code. Furthermore, C++ is suitable for both commercial-application and systems-programming projects. For now, C++ appears to be the most popular choice among many OOP programmers, but there is a host of other OOP languages, such as Smalltalk, common lisp object system (CLOS), and Eiffel. Additionally, OOP capabilities are being added to more traditional popular computer programming languages such as Pascal.

DEPR:

In the directory structure defined below, documents are stored corresponding to the preferences. The top level of the directory structure is the content-type, the next level is language (for NLS support). For example, to create text/html content in US English & French, the directory structure given below would contain the HTML documents for each of the transactions. The vPOS terminal cartridge has a configuration file that allows the user to specify the content-type as well as the language to be used for a cartridge. The first release of the vPOS terminal cartridge supports one content-type and language for each server.

DEPR:

A Data Manager provides storage and retrieval of generic data items and database records. It is assumed that data fields, index fields or entire data records can be marked as encrypted and the encryption process is largely automated. The data manager has no specific knowledge of database records appropriate to different payment methods. This layer is separated out so as to reduce changes required when new payment methods are introduced. However RSA key pairs and certificates might be considered as "simple" data types. This component also provides an abstraction which supports wallet files on computer disk or contained in smart cards.

DEPV:

The Oracle7 Parallel Server option extends the reliability of applications by transparently harnessing the power of clustered computers in a single logical processing complex that can tolerate individual machine failures.

ORPL:

Business Wire, RSA Data Security, Inc. Establishes Japanese Subsidiary Company to Market RSA Encryption Technology to Developers in Japan, Feb. 8, 1996, pp. 7-8.

ORPL:

InformationWeek, Cisco Places \$4 Billion Network Bet--StrataCom Buy Seen Extending ATM, Tying Switching and Routing, Apr. 29, 1996, pp. 116-117.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC
Help					Logout				

[Help](#)
[Logout](#)
[Main Menu](#) | [Search Form](#) | [Result Set](#) | [Show S Numbers](#) | [Edit S Numbers](#) | [Referring Patents](#)
[First Hit](#)
[Previous Document](#)
[Next Document](#)
[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KMC](#)

Document Number 7

Entry 7 of 61

File: USPT

Mar 7, 2000

US-PAT-NO: 6035275

DOCUMENT-IDENTIFIER: US 6035275 A

TITLE: Method and apparatus for executing a human-machine dialogue in the form of two-sided speech as based on a modular dialogue structure
DATE-ISSUED: March 7, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brode; Holger W.	Aachen	N/A	N/A	DEX
Schroer; Olaf	Aachen	N/A	N/A	DEX
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ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
U.S. Philips Corporation	New York	NY	N/A	N/A	02

APPL-NO: 9/ 005626

DATE FILED: January 9, 1998

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: EP 97200050

FOREIGN-PRIORITY-APPL-DATE: January 9, 1997

INT-CL: [7] G10L 3/00

US-CL-ISSUED: 704/275; 704/272

US-CL-CURRENT: 704/275; 704/272

FIELD-OF-SEARCH: 704/270, 704/275, 704/200, 704/272

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5357596</u>	October 1994	Takebayashi et al.	704/275
<u>5548681</u>	August 1996	Gleaves et al.	704/233
<u>5576951</u>	November 1996	Lockwood	705/27
<u>5671329</u>	September 1997	Hatazaki	704/253
<u>5694558</u>	December 1997	Sparks et al.	395/326
<u>5878390</u>	March 1999	Kawai et al.	704/231

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vol. 1, No. 1, pp. 106-112, Jul. 1983.
"Man-Machine Speech Dialogue Acts", J.A. Waterworth, Br. Telecom
Technology J. vol. 1, No. 1, Jul. 1983, pp. 106-112.

ART-UNIT: 271

PRIMARY-EXAMINER: Dorvil; Richemond

ABSTRACT:

In a dialogue structure outputting speech items interrogating an access call while examining subsequently received human speech items for ascertaining an actual transaction instance further outputting speech in accordance with the ascertaining until either attaining a positive transaction result, or otherwise exiting the dialogue in case of failure. In particular, the dialogue is constructed from hierarchically arranged and callable subdialogues constituting respective mutually independent building blocks, which are arranged for generating a particular outcome if a positive result is attained by the subdialogue in question. The subdialogues offer interfaces for mutual coupling with a hierarchically superior subdialogue, so that the overall structure is formed as based on a selection of subdialogues and exclusively based on required partial results by each of the subdialogues in the structure.

14 Claims, 3 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC
Help					Logout				

[Help](#)
[Logout](#)

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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[First Hit](#)
[Previous Document](#)
[Next Document](#)

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Document Number 7

Entry 7 of 61

File: USPT

Mar 7, 2000

DOCUMENT-IDENTIFIER: US 6035275 A

TITLE: Method and apparatus for executing a human-machine dialogue in the form of two-sided speech as based on a modular dialogue structure

BSPR:

The invention relates to a method as recited in the preamble of claim 1. Various systems have come into use that confront a human user with a machine that maintains a bidirectional speech channel, in that human speech is analyzed and understood, and riposted with machine-generated speech. The nature of the transaction can be economical, in that a physical item or a service is ordered by or rendered to a customer. Alternatively, the transaction can be an enquiry system such as relating to public transport facilities, weather forecast, etcetera. Still other types of transaction are feasible as well. Recognizing human speech remains a technically exacting problem, because the analysis itself is complicated, and also because the speech is itself often inconsistent on various different levels: words may be missing or superfluous, the actual phrase may be selfcontradictory or inconclusive, or a particular sentence may render another one meaningless. In consequence, the invention recognizes that such elements of a system which have proved to be working correctly should be considered as gold nuggets, and if possibly be reused for various other purposes.

DEPR:

Block 28 is a dialogue control subsystem that undertakes to understand the speech entries received, given the intention of the speech entries to reach a particular transaction result, that should then be recorded in the transaction memory 30. Block 30 is a transaction memory which is organized to store parts of the request of the user as far as they have been recognized, as well as indications of what policy the machine is to follow next, in order to attain optimal progress, as far as clear. Also, the ultimate transactions may be recorded for subsequent execution. The nature of the transaction itself is not considered further. The storage format should be appropriate to the application. In an information system, the entry may specify the exact nature of the information required by the user person, so that after the full specification thereof has been found, the system may access a background database, and subsequently wipe out the information in memory 30.

DEPR:

Further, generally all subdialogues have internally a unitary setup. By way of exception, subdialogue 76 has internally two separate parts that are called siblings. Each of the siblings of a particular subdialogue is arranged to lead to an identical result if successful, be it in another manner. For example, part 89 may be able to recognize numbers when expressed as either forty eight or eight and forty. On the other hand, part 91 may recognize in particular

sequences consisting exclusively of individual digits like: four-eight. If the recognition under control of sibling proceeds in an insufficient manner, the subdialogue in question may switch-over from one particular sibling pertaining to the subdialogue in question, to another sibling. Likewise, subdialogue 64 has four siblings. An example of use thereof may be the recognizing of an order for a stockbroker transaction: here, the recognition of the command buy versus sell is extremely relevant. However, in many languages these two terms resemble each other quite closely. In consequence, either upon sensing a potential problem if the recognition is feasible but not optimal, or alternatively even automatically, the system changes to the English version of a particular sibling after the version in another language has been recognized already. In certain situations, the provision of four siblings in parallel would be worthwhile.

DEPR:

According to the mainstay of the present application, and also as commonly used, a subdialogue implies utterances from two sides. According to an extension of the invention, a particular module as shown in FIG. 2 may restrict to only give a machine speech output, while the remaining aspects of the module, such as the interface, are uniform with respect to the other modules. It is also feasible to have one or more modules that represent no visible effect at all to a user person. For brevity, all such modules will be called subdialogues hereinafter.

DEPR:

Hereinafter, first the conceptual aspects of the invention are discussed. Now, a particular application is constructed from subdialogues or HDDL modules, that together are linkable in a dialogue structure. Herein, HDDL is a High Level Dialogue Definition language. A dialogue can use through calling other dialogues, which by virtue of their capability are named subdialogues. In this manner, certain activities or services which are part of the overall service, can be encapsulated in the dialogue structure. By way of example, a home banking application usually needs to know the PIN number of a particular customer. Suppose now, that the system experiences a recognition problem while running this part of the dialogue, Now according to the invention, the system can call within the same subdialogue instead of the version or sibling presently used, another version or sibling in order to better understand the actual caller. According to one embodiment, the new sibling may repeat or mirror the original one, while the recognition is executed in a more exact manner. In another embodiment, the machine speech output to the user is made slower. In a third embodiment, the subdialogue introduces additional words or sentences that were not present in the original version, to render the subdialogue more clear. Such an additional expression may represent an example being given to a an unexperienced user person. Here, encapsulation means that the functionality of the subdialogue remains the same, but only the actual implementation changes. The above sibling concept allows the designer to implement the same dialogue functionality in respective different manners, whilst maintaining or not maintaining identical speech output to human users. The envisaged result is uniform across the various siblings. A dialogue without a plurality of siblings is in a semantic sense a dialogue with only a single sibling. Note that the top level dialogue does not have the sibling feature in the embodiment considered.

CLPR:

1. A method for in a transaction environment executing a machine-controlled human-machine dialogue, said method comprising the steps of:

CLPR:

6. A method as claimed in claim 1, wherein at least one extra quasi-subdialogue has been introduced into the structure that interfaces in corresponding manner, but does not provide machine-speech output.

CLPR:

10. An apparatus arranged for in a transaction environment executing a machine-controlled human-machine dialogue, said apparatus comprising:

ORPL:

Telecom Technology. Waterworth, Man-Machine speech `dialogue acts`. vol. 1, No. 1, pp. 106-112, Jul. 1983.

ORPL:

"Man-Machine Speech Dialogue Acts", J.A. Waterworth, Br. Telecom Technology J. vol. 1, No. 1, Jul. 1983, pp. 106-112.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC

Help

Logout

WEST

[Help](#)[Logout](#)[Main Menu](#) [Search Form](#) [Result Set](#) [Show S Numbers](#) [Edit S Numbers](#) [Referring Patents](#)[First Hit](#)[Previous Document](#)[Next Document](#)[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Claims](#) [KMC](#)

Document Number 6

Entry 6 of 61

File: USPT

Apr 4, 2000

US-PAT-NO: 6047067

DOCUMENT-IDENTIFIER: US 6047067 A

TITLE: Electronic-monetary system

DATE-ISSUED: April 4, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

APPL-NO: 8/ 994088

DATE FILED: December 19, 1997

PARENT-CASE:

This application is a divisional of application Ser. No. 08/427,287, filed Apr. 21, 1995 now U.S. Pat. No. 5,799,087, which is a continuation-in-part of U.S. application Ser. No. 08/234,461, filed Apr. 28, 1994 now U.S. Pat. No. 5,557,518.

INT-CL: [7] G07F 19/00

US-CL-ISSUED: 380/24; 705/41, 235/379, 902/26

US-CL-CURRENT: 705/68; 235/379, 705/41, 705/69, 902/26

FIELD-OF-SEARCH: 902/2, 902/26, 235/379, 705/41, 380/24

REF-CITED:

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<u>3932730</u>	January 1976	Ambrosio	N/A
<u>3934122</u>	January 1976	Riccitelli	N/A
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ART-UNIT: 277

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ATTY-AGENT-FIRM: Morgan & Finnegan, LLP

ABSTRACT:

An electronic-monetary system having (1) banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits and electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction

devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices in off-line transactions; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a clearing bank for balancing the electronic money accounts of the different issuing banks; (6) a data communications network for providing communications services to all components of the system; and (7) a security arrangement for maintaining the integrity of the system, and for detecting counterfeiting and tampering within the system. An embodiment of the invention includes a customer service module which handles lost money claims and links accounts to money modules for providing bank access.

16 Claims, 56 Drawing figures

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Document Number 6

Entry 6 of 61

File: USPT

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DOCUMENT-IDENTIFIER: US 6047067 A

TITLE: Electronic-monetary system

ABPL:

An electronic-monetary system having (1) banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits and electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices in off-line transactions; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a clearing bank for balancing the electronic money accounts of the different issuing banks; (6) a data communications network for providing communications services to all components of the system; and (7) a security arrangement for maintaining the integrity of the system, and for detecting counterfeiting and tampering within the system. An embodiment of the invention includes a customer service module which handles lost money claims and links accounts to money modules for providing bank access.

BSPR:

The Automated Clearing House (ACH) and point of sale (POS) systems are examples of electronic funds transfer systems that have become used by retail and commercial organizations on a substantial basis in recent years. However, the payments made through these types of EFT systems are limited in that they cannot be performed without the banking system. Moreover, ACH transactions usually cannot be performed during off business hours.

BSPR:

Home Banking bill payment services are examples of an electronic funds transfer system used by individuals to make payments. Currently, home banking initiatives have found few customers. Of the banks that have offered services for payments, account transfers and information over the telephone lines using personal computers, less than one percent of the bank's customers are using the service. One reason that Home Banking has not been a successful product is because the customer cannot deposit and withdraw money as needed in this type of system.

BSPR:

Current EFT systems, credit cards, or debit cards, which are used

with an on-line system to transfer money between accounts, such as between the account of a merchant and that of a customer, cannot satisfy the need for an automated transaction system that provides for the transfer of universally accepted economic value outside of the banking system. Moreover, credit and debit card systems are generally insecure against fraud and do not provide for adequate privacy.

BSPR:

To implement an automated, yet more convenient transaction system that does not require the banking system to intermediate the transfer, and that can dispense some form of economic value, there has been a trend towards off-line electronic funds transfer. For example, numerous ideas have been proposed for some form of "electronic money" that can be used in cashless payment transaction as alternatives to the traditional currency and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059, entitled "MODULAR FUNDS TRANSFER SYSTEM."

BSPR:

None of these proposed paperless payment systems are comprehensive enough so as to implement a multipurpose electronic monetary system that includes not only the automated devices that allow subscribers to transfer electronic funds or money between them without any intermediating system, but that also encompasses and includes an entire banking system for generating the value represented by the electronic money and for clearing and settling the electronic money accounts of the banks and financial institutions involved to maintain a monetary balance within the system.

BSPR:

To achieve the foregoing, and other objects, the method and apparatus of the present invention employ a preferred embodiment in the form of an electronic-monetary system having (1) banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits and electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices in off-line transactions; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a clearing bank for balancing the electronic money accounts of the different issuing banks; (6) a data communications network for providing communications services to all components of the system; and (7) a security arrangement for maintaining the integrity of the system, and for detecting counterfeiting and tampering within the system.

BSPR:

In the preferred embodiment, the functions of the money generating devices, the transaction devices, and the teller devices will be performed by a combination of tamper-proof computer hardware and application software modules that may be networked together. Information is transmitted in an encrypted form to provide security from unauthorized inspection. The electronic money is transmitted with digital signatures to provide authentication, and security from modification or counterfeiting.

BSPR:

In an embodiment of the present invention, the system includes a plurality of issuing banks; a generator module for creating electronic money; teller modules coupled to the generator modules, for performing teller transactions and for interacting with other teller modules, such transactions including the accepting and the distributing of the electronic money; a security system for providing the overall integrity of the electronic monetary system; a clearing and settling process for balancing the electronic money accounts of the separate issuing banks and for clearing the electronic money issued by the issuing banks; and a plurality of transaction modules owned by authorized users, for transferring the electronic money between the transaction modules and between the transaction modules and the teller modules; and a customer service module handling lost money claims and for linking accounts to money modules to provide bank access.

BSPR:

In accordance with another aspect of the invention, the functions of the generator modules, the transaction modules, the teller modules, and the customer service modules will be performed by a combination of tamper-proof computer hardware and application software that may be networked together.

DEPR:

In accordance with the present invention, another embodiment for EMS system security may be provided as follows. Referring to FIG. 1A, EMS will have two types of security servers, primary 1182 and ordinary 1184. The primary security servers 1182 certify the (ordinary) security servers 1184. The security servers 1184 certify all other modules (transaction MMs 1186, Teller MMs 1188, money generator modules 1190, and customer service modules 1192) in the system.

DEPR:

The primary security servers 1182, security servers 1184, teller money modules 1188, money generator modules 1190, customer service modules 1192, and transaction money modules 1186 are assigned identification numbers (id's) so that the numbers can be checked for authenticity. A 48-bit prime number "p" is generated and a primitive root "a" modulo p (where $a \cdot \text{sup}.n \cdot \text{notident}.1(p)$ for all $1 \leq n \leq \text{toreq}.n$

DEPR:

The security servers 1184 are initially certified by the primary security servers 1182 at manufacturing. Such primary security servers may be connected by a Security Server Manufacturing LAN 1204. Referring to FIG. 1B, the security servers 1184 receive various security information which they pass to the other modules. The security servers provide security services for the EMS Network 1198 and the bank LANs 1200, such as network sign-on where they pass updated security information. The security servers 1184 receive this information from the primary security servers 1182 over the Security Network 1196. Transaction money modules 1186 communicate with the EMS Network 1198 via network servers 1206 (NS). Participating banks have teller money module(s) 1188 and perhaps money generator(s) 1190 connected to their LANs 1200.

DEPR:

The CSM has two primary functions. First, the CSM creates account profiles so that a money module can access bank accounts, revalidate the money module link to bank accounts, and validate account numbers. These transactions are more fully described hereinbelow with reference to FIGS. 18-20. Second, the CSM functions to claim lost notes in response to a request from a host customer services representative, which is described in further detail in FIG. 21 and FIG. 22. A CSM has the same security functions as a money module and a special range of numbers for its identifier (see "Module Numbering Scheme"). The performance of these functions by the CSM simplifies

the validate account number process for the Teller Module.

DEPR:

An overview of the network sign-on procedure is provided with reference to FIG. 5. The Sign-On protocol describes the situation where a module 1243 desires access to the EMS Network 1198 for recertification, deposit, withdrawal or other reason. The module 1243 may be a transaction money module 1186, teller money module 1138, money generator module 1188, or customer service module 1192. (a) Establish a communication between module 1243 and network server 1206. (b) Pass the module's certificate to the network server 1206. (c) The network server 1206 generates a random verification number V and a random key K; the network server then passes the module's certificate, V, and K to a security server 1184 (encrypted by a NS/SS key). (d) The module 1243 and the security server 1184 establish a secure communication session (via session key (MM/SS)). (e) The security server 1184 passes the time/date, update bad ID list, update list of primary security server public keys, public key length, global recertification (if necessary), and recertified module certificate (if necessary). (f) End session with module 1243 and send V and K to the module 1243. (g) Encrypt V with K and send to the network server 1206. (h) The network server 1206 acknowledges network sign-on to the module 1243. (i) The module 1243 then informs the network server 1206 of the destination (if any) to which it wishes to be connected. (j) The network server 1206 establishes a connection to the destination.

DEPR:

FIG. 9 shows the protocol for a foreign exchange transaction using dollars and pounds as exemplary monetary units. Initially, A agrees to exchange with B dollars (\$) for pounds (.English Pound.) at an exchange rate of \$/.English Pound. (step 1602). A and B then sign on their money modules and the modules prompt their subscribers for the type of transaction (steps 1604-1610). A chooses to buy foreign exchange and B chooses to sell foreign exchange (steps 1612-1614). A and B establish a secure transaction session (steps 1616-1620).

DEPR:

If X is a teller money module 1188, then To Bank X informs the bank that it should reverse its accounting transactions (by appropriate debits and credits) (steps 1740-1742). If X is a transaction money module 1186 and no Ready-to-Commit message has been sent, then To Subscriber X informs the subscriber that the transaction was aborted (step 1744).

DEPR:

The process flow to set up an update credit transaction begins with a Setup Credit process between a money module A and a bank's Teller money module B, (step 1854), which is now described further with reference to FIG. 14.

DEPR:

After the steps of money module sign-on, transaction selection, and network sign-on are completed, A and B then establish a secure session (step 1884). Then, Transaction money module A makes a credit request from the Teller money module B (step 1886), according to a Request Credit procedure more fully described with reference to FIG. 15.

DEPR:

Referring now to FIG. 15, a process for requesting credit will now be described. It should be noted that although the figure denotes the parties as "X" and "Y," in the process steps described below, they are applicable to any money module transacting with a Teller money module.

DEPR:

To begin, if there is a credit note for the selected account Note Directory X sends the amount of this credit note to To Teller X (step 1897). To Teller X determines the net difference between the total credit amount requested by subscriber A and the credit note amount and sends a credit update request to the Teller money module, requesting a certain net amount of credit to be authorized from a specific account. In its transmission of the update credit request, the account number and the account profile will be transmitted from the requesting money module to the Teller money module along with the net credit amount (step 1898). This message is sent according to the Send Message protocol (step 1900), in which the message is encrypted using the described cryptographic techniques.

DEPR:

Once the credit withdrawal request and the account number and profile are transmitted to the Teller money module, a procedure to validate the account number is initiated (Step 1902). A flow diagram depicting how an account number is validated is shown in FIG. 20, which is described separately below for clarity of exposition.

DEPR:

With the account information validated, To Bank Y verifies that there is sufficient credit to support the credit update request amount (Step 1904). Sufficient credit will prompt To Transaction Y to send an acknowledgement to X, which receives the acknowledgement via its To Teller application function (steps 1906-1912).

DEPR:

An insufficient amount of credit, however, will cause the subscriber to be prompted to enter a new amount for the credit update (steps 1914-1918, FIG. 15B). Entry of a new amount for credit update by the subscriber results in the To Teller application sending the new credit amount to the To Bank application of the Teller money module to verify if there are sufficient funds to cover the latest requested amount (steps 1922-1924), returning to Step 1904 of FIG. 15A. If no new amount is requested by the subscriber, then the transaction is aborted (step 1926).

DEPR:

Referring back to FIG. 14, upon return from the Request Credit Withdrawal process, To Teller A invokes a transfer of the total currency notes, transferred credit notes (i.e., credit notes received in previous transactions) and credit note for the account to the Teller money module (Step 1888). If there are no notes being held in the Transaction money module at the time the credit withdrawal request is made, the To Teller A application sends a message to the Teller money module that there are no notes present (steps 1892-1894). If there are notes being held in the Transaction money module, however, then the electronic notes are transferred from A to Teller B according to the Transfer Notes procedure described hereinabove with reference to FIG. 8 (step 1896).

DEPR:

Returning to FIG. 13, To Transaction B checks if any currency notes and transferred credit notes have been transferred (steps 1856-1858), and if any of these type of notes have indeed been transferred from Transaction money module A, accounting transactions are posted to reflect this situation by the To Bank application B (step 1860). Both in the case when no notes have been transferred from the money module and after the accounting transactions are posted in step 1860, a session is established between the Teller money module and the Money Generator module (step 1862). To Bank B updates the credit line by adding the amount of the credit note (if any) to the available line

of credit to get the total available credit and deducting the requested credit amount from the total available credit. If no notes (including currency notes and credit notes) are to be created because the requested credit amount was zero and no currency notes were transferred, then the money modules will finalize the transaction according to the Commit procedure described hereinabove with reference to FIG. 10 (steps 1865-1875).

DEPR:

If, however, any notes (credit or currency) are to be created, due to a nonzero credit amount request and/or transferred currency notes, then notes are requested by Teller B from Money Generator module according to the Request Notes procedure (steps 1865-1866). The requested notes in the Money Generator module are transferred to the Teller money module B using the Transfer Notes process outlined above (see FIG. 8) for transferring electronic notes (step 1868). The notes are then transferred from the Teller money module B to the Transaction money module using the same Transfer Notes process (step 1870). Finally, to successfully complete the update credit procedure, the money modules will finalize the transaction according to the Commit procedure described hereinabove with reference to FIG. 10. The Commit process is initiated first by the Transaction money module committing its transaction with the Teller money module B (step 1872). Then, the Commit process is executed between Teller money module B and the Money Generator module (step 1874). That completes the processing for one complete credit update from an Issuing Bank.

DEPR:

FIG. 16 schematically illustrates a hypothetical series of transactions among a Money Generator Module having an identifier number "1" (referred to as Money Generator 1), a teller money module having identifier "2" (referred to as teller module 2), and four transaction money modules having integer identifiers 3 through 6 (referred to as transaction modules 3-6), associated with a single note generated by Money Generator 1 at the date/time indicated by 1:00:00.

DEPR:

Thus, when electronic representation of currency 2300 is transferred to teller module 2, transfer record 2302 is appended to the transfer group, and includes the transferee identification number (e.g., "2"), the date-of-transfer (e.g., 1:00:00), the transfer amount (e.g., \$50), and the sequence number (e.g., "1"). For illustrative convenience, the note transfers represented in FIG. 17 only show the newly appended transfer record portion of the transferred note. Also for convenience, the transfer group data field indicating total number of transfers is not shown.

DEPR:

The electronic representation of currency 2300 from money generator 1 is stored in a teller module 2. As part of the withdrawal of \$50 by transaction module 3, teller module 2 forms an electronic representation of currency by appending transfer record 2304 to a copy of the data fields in the electronic representation of currency 2302 augmented by transfer record 2302. This note is then stored in transaction module 3 upon completion of the withdrawal. It may be understood that each node of the note transfer tree shows the newly appended transfer record portion of the transferred note.

DEPR:

At 2:00:06, transaction module 5 transfers the entire \$10 note to transaction module 3 by transfer record 2316. From the \$25 note received at 3:08:01 by transaction module 5 from transaction module 3, at 3:09:12 transaction module 5 pays transaction module 6 \$20 by transfer record 2318, and deposits the remaining \$5 to teller module

2 at 4:12:05 by transaction record 2320.

DEPR:

At 4:10:00, transaction module 6 transfers \$10 to transaction module 5 according to transfer record 2322, and at 5:00:06 transfers the remaining \$10 to transaction module 3 by transfer record 2324. In accordance with an embodiment of the present invention, it is understood that upon deposit of money from a transaction module to a bank, all notes (including credit notes) in the transaction module are sent to the banking system and are updated. Therefore, substantially simultaneous with the above described deposit from transaction module 5 to teller module 2 represented by transfer record 2320, an additional and concurrent transfer represented by transfer record 2326 occurs automatically. Then, a new note having a value of \$5 (assuming transaction module 3 had no credit notes) will be generated by money module 1 and transferred to transaction module 3 via teller module 2, with the appropriate transfer records appended (not shown). Accordingly, it may be appreciated that updating all notes in a transaction money module upon a transaction (e.g., deposit or withdrawal) between the transaction module and a teller module facilitates the note reconciliation process by providing an additional means for returning notes to the banking system.

DEPR:

At 5:00:10 transaction module 3 deposits \$10 to teller module 2 by transaction record 2328. As described above for the deposit by transaction module 5, concurrent with the deposit by transaction module 3 represented by transaction record 2328, additional and concurrent transfers (not shown) to the banking system of all notes possessed by transaction module 3, including those represented by transfer record 2316 and transfer record 2321, occurs. Then, the banking system returns to transaction module 3 a note having a value equal to the total notes sent to the banking system for updating (e.g., \$15).

DEPR:

Thus, at this point in time, only transaction module 6 possesses transferable vestiges of original note 2300, as represented by transfer notes 2312 and 2314. If transaction module 6 transacts (e.g., deposit or withdrawal) with a teller module before transferring these notes to other transaction money modules, then there will be no transferable notes in circulation that relate to original note 2300; all notes derived from transfers of original note 2300 will have been returned to the banking system, permitting complete construction of the note transfer tree shown in FIG. 17. The date-of-expiration effectively facilitates note reconciliation by limiting the time that a note may be transferred.

DEPR:

To Teller B then checks to determine whether an account profile is already stored for the bank associated with the recently created ("new") account profile. If an account profile for the bank already exists in the To Teller B application, then it is replaced by To Teller B with the new account profile; otherwise, To Teller B adds the new account profile. (Steps 1970-1974).

DEPR:

FIG. 19 shows the protocol for a subscriber to revalidate the subscriber's money module link to bank accounts. The process begins when the subscriber signs on to his/her money module, and in response to a prompt for a transaction generated by To Subscriber A, the subscriber chooses to revalidate a bank account link for a bank associated with a customer service module (CSM) B (steps 1978-1982). The money module invokes and executes the network sign-on protocol described with reference to FIG. 6, hereinabove, and a secure session

is established between money module A and CSMB (step 1986). To Teller A then sends the account profile for the bank accounts to CSMB (steps 1988-1990). Create Account Profile B receives the message, and Maintain Security B validates the CSM certificate and the signature of the account profile (steps 1992-1995). If the certificate or signature is invalid, then the CSM aborts the transaction (step 2000). If the certificate is valid, To Host B sends the list of accounts from the account profile to the CSM host (CSMH), which checks with the on-line banking system to determine whether each account is currently active (steps 1996-2001). If any of the accounts has expired, CSMH signals an abort message to CSM (step 2010), which then aborts the transaction according to the Abort process (step 2000).

DEPR:

As can be seen, the Validate Account Number process is simplified for the Teller money module as compared to an embodiment of the present invention that does not include a CSM.

DEPV:

2) Creating a method for assigning security server, money generator and teller identifiers (see Module Numbering Scheme). These identifiers are checked in:

DETL:

If a.sup.n .tbd. m(p) and (1) 1 .ltoreq. m .ltoreq. 99,999 then n is assigned as the id of a primary security server, (2) 100,000 .ltoreq. m .ltoreq. 999,999 then n is assigned as the id of a security server, (3) 1,000,000 .ltoreq. m .ltoreq. 6,999,999 then n is assigned as the id of a teller money module, (4) 7,000,000 .ltoreq. m .ltoreq. 9,999,999 then n is assigned as the id of a money generator module, (5) 10,000,000 .ltoreq. m .ltoreq. 11,999,999 then n is assigned as the id of a customer service module, (6) m .gtoreq. 12,000,000 then n is assigned as the id of a transaction money module.

CLPV:

a teller module associated with said issuing bank, capable of storing said electronic representations of money;

ORPL:

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ORPL:

Financial Information System, Extra No. 3, May 26, 1986, Financial Information System Center (FISC); with partial English language translation.

ORPL:

Study Aids for Bills and Checks, Makoto Tairo, Jun. 10, 1990, Japan Business Publisher; with English language translation.

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Proposal of an Electronic Funds Transfer Method Considering User's Privacy, Hirotugu Kinoshita and Shigeo Tsuji, The Transactions of the Institute of Electronics, Information and Communication Engineers, vol. J70-D No. 12, Dec. 1987; with English translation.

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ORPL:

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ORPL:

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Prospects For IC Card Applications, May 28, 1991, Yano Economy

Laboratory (Japanese language).

ORPL:

Series 2200/1100, Total On-Line Banking System FAST 1100 Manual / Applicable Business Version, Apr. 1989, UNISYS (Japanese language).

ORPL:

Applicable Business and Record Formats, Jan. 1984, National Banking Association (Japanese language).

ORPL:

Notification No. 826 Re: On-Line Fund Transfer Transactions Through Communication Line Between Financial Institutions Computers and Customers' Terminals, Apr. 7, 1989, Banking Bureau of Ministry of Finance (Japanese language).

ORPL:

Basic Design of Bank POS System (Draft No. O), Jan. 1985, NTT (Japanese language).

ORPL:

ANSER--Function Adding Services Specification Ver. VIII, Jun. 1989, NTT Data Communication Co., Ltd. (Japanese language).

ORPL:

CAFIS--Design of Connection Conditions (Bank POS Business Version) Ver. 2, Feb. 1989, NTT Data Communication Co., Ltd. (Japanese language).

ORPL:

CAFIS--Design of Connection Conditions (Bank POS Business Version) Ver. 1, Dec. 1989, NTT Data Communication Co., Ltd. (Japanese language).

ORPL:

CAFIS--Specification of Customer-Basis Agency Sales Business Service (Bank POS Business Version), Ver. 1, Aug. 1989, NTT Data Communication Co., Ltd. (Japanese language).

ORPL:

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ORPL:

"Le paiement electronique", P. Remery, J.C. Pailles, and F. Lay, L'Echo des Recherches, No. 134, 4.degree. trimester 1988--original French version and English Translation.

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Search Results - Record(s) 1 through 10 of 13 returned.

☐ 1. Document ID: US 6061665 A

Entry 1 of 13

File: USPT

May 9, 2000

US-PAT-NO: 6061665

DOCUMENT-IDENTIFIER: US 6061665 A

TITLE: System, method and article of manufacture for dynamic negotiation of a network payment framework

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 2. Document ID: US 6016484 A

Entry 2 of 13

File: USPT

Jan 18, 2000

US-PAT-NO: 6016484

DOCUMENT-IDENTIFIER: US 6016484 A

TITLE: System, method and article of manufacture for network electronic payment instrument and certification of payment and credit collection utilizing a payment

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 3. Document ID: US 5982891 A

Entry 3 of 13

File: USPT

Nov 9, 1999

US-PAT-NO: 5982891

DOCUMENT-IDENTIFIER: US 5982891 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 4. Document ID: US 5963924 A

Entry 4 of 13

File: USPT

Oct 5, 1999

US-PAT-NO: 5963924

DOCUMENT-IDENTIFIER: US 5963924 A

TITLE: System, method and article of manufacture for the use of payment instrument holders and payment instruments in network electronic commerce

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 5. Document ID: US 5949876 A

Entry 5 of 13

File: USPT

Sep 7, 1999

US-PAT-NO: 5949876

DOCUMENT-IDENTIFIER: US 5949876 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 6. Document ID: US 5917615 A

Entry 6 of 13

File: USPT

Jun 29, 1999

US-PAT-NO: 5917615

DOCUMENT-IDENTIFIER: US 5917615 A

TITLE: System and method for facsimile load balancing

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 7. Document ID: US 5917912 A

Entry 7 of 13

File: USPT

Jun 29, 1999

US-PAT-NO: 5917912

DOCUMENT-IDENTIFIER: US 5917912 A

TITLE: System and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 8. Document ID: US 5915019 A

Entry 8 of 13

File: USPT

Jun 22, 1999

US-PAT-NO: 5915019

DOCUMENT-IDENTIFIER: US 5915019 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 9. Document ID: US 5910987 A

Entry 9 of 13

File: USPT

Jun 8, 1999

US-PAT-NO: 5910987

DOCUMENT-IDENTIFIER: US 5910987 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 10. Document ID: US 5892900 A

Entry 10 of 13

File: USPT

Apr 6, 1999

US-PAT-NO: 5892900

DOCUMENT-IDENTIFIER: US 5892900 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 11. Document ID: US 5815657 A

Entry 11 of 13

File: USPT

Sep 29, 1998

US-PAT-NO: 5815657

DOCUMENT-IDENTIFIER: US 5815657 A

TITLE: System, method and article of manufacture for network electronic authorization utilizing an authorization instrument

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 12. Document ID: US 5539530 A

Entry 12 of 13

File: USPT

Jul 23, 1996

US-PAT-NO: 5539530

DOCUMENT-IDENTIFIER: US 5539530 A

TITLE: Facsimile machine with custom operational parameters

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 13. Document ID: US 5438433 A

Entry 13 of 13

File: USPT

Aug 1, 1995

US-PAT-NO: 5438433

DOCUMENT-IDENTIFIER: US 5438433 A

TITLE: System and method for facsimile cover page storage and use

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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[Next Document](#)
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Document Number 3

Entry 3 of 61

File: USPT

May 9, 2000

US-PAT-NO: 6061646

DOCUMENT-IDENTIFIER: US 6061646 A

TITLE: Kiosk for multiple spoken languages

DATE-ISSUED: May 9, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Martino; Michael John	Austin	TX	N/A	N/A
Paulsen, Jr.; Robert Charles	Austin	TX	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corp.	Armonk	NY	N/A	N/A	02

APPL-NO: 8/ 993606

DATE FILED: December 18, 1997

INT-CL: [7] G06F 17/28, H04M 1/64

US-CL-ISSUED: 704/3; 379/88.06, 704/9

US-CL-CURRENT: 704/3; 379/88.06, 704/9

FIELD-OF-SEARCH: 704/1, 704/2-7, 704/254, 704/257, 704/270, 704/275, 704/277, 379/88.04, 379/88.05, 379/88.06

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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<u>5375164</u>	December 1994	Jennings	379/88.05
<u>5388146</u>	February 1995	Morduch et al.	379/52
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<u>5805771</u>	September 1998	Muthasamy et al.	704/257
<u>5875422</u>	March 1999	Eslambolchi et al.	379/88.06

ART-UNIT: 277

PRIMARY-EXAMINER: Isen; Forester W.

ASSISTANT-EXAMINER: Edouard; Patrick N.

ATTY-AGENT-FIRM: LaBaw; Jeffrey S.

ABSTRACT:

The method for providing information in response to a question in one of a plurality of natural spoken languages begins by recognizing a detected utterance with a speech recognition engine equipped with a plurality of small dictionaries. Each of the small dictionaries is for respective one of the plurality of languages. Each small dictionary including speech data for a selected few common words in the respective language. Next, the method selects one of the plurality of languages as the language of the detected utterance based on a number of recognized words for each language from the small dictionaries. Next, a more thorough recognition of the detected utterance using a large dictionary for the language of the detected utterance which contains information on a much larger vocabulary. Finally, the method responds to the user in the selected language, i.e. the language of the detected utterance, either aurally or visually. Once the language of a first utterance is identified, a timer is started. Responsive to detecting a new utterance within a predetermined period, the method continues using the large dictionary to recognize the new detected utterance and responding to the user in the language of the detected utterance. If the timer times out, the method reinitializes and a new utterance is tested by all of the small dictionaries.

22 Claims, 4 Drawing figures

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First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC
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[Classification](#)
[Date](#)
[Reference](#)
[Claims](#)
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Document Number 3

Entry 3 of 61

File: USPT

May 9, 2000

DOCUMENT-IDENTIFIER: US 6061646 A

TITLE: Kiosk for multiple spoken languages

ASNM:

International Business Machines Corp.

ASZZ:

International Business Machines Corp.

BSPR:

This invention relate generally to speech recognition with a data processing system. More particularly, it relates to a natural language sensitive kiosk that will accept verbal input from a human or machine in any of a plurality of languages and which will then respond to the requests in the natural language of the inquiry.

BSPR:

It would be desirable to provide a multilingual speech interface which could understand and respond in several different spoken languages. Such an interface would be useful to provide computing based services in venues in which people of limited computer skill and who speak different languages congregate. It would be desirable that a user could approach the kiosk, ask a question in his native language, and have the kiosk respond to the user in his native language either by speech output or through the displayed interface. There are a number of situations in which such a natural language kiosk would be useful. These situations include, but are not limited to, the Olympics for directions to events and buildings, for scores, medals and standings of competitors; airports for information and directions to baggage pickups, taxi stands, casinos, limousine services, car rental desks, ticket counters and arrival & departure gates; train and bus stations for services similar to airports; ports-of-entry for information and directions; international attractions such as the Eiffel Tower, for information, ticket counters and directions; EPCOT Center for restaurant reservations and generally, any place or event at which there will be a number of people whose native languages will be different. Input from a telephone (or computer) is considered machine input, although it may be similar to a spoken utterance.

BSPR:

The problems faced for speech recognition and speech synthesis are compounded by having a plurality of possible languages to understand and to which to respond. Essentially, the massive speech dictionaries and speech recognition engines must be replicated for each language. Since a typical speech recognition machine typically requires at least 32 MB of RAM with a high powered processor, it becomes difficult, if not

DEPR:

In this specification, the term "language" means a natural language, i.e. human language, used for human communications, e.g., English, French, Spanish, German, and so forth. Genre is defined herein as a distinctive style of use of a language in some specific context. For example, genre within English includes technical writing, business writing, legal writing, medical writing, fiction, and many others. Thus, genre applies to different variations of the same language involving different styles and manners of word use within a natural language which are reflected in coded documents, and may involve a distinctive use of standard words in a language or may add new words to a language. Genre may reflect particular jargons and dialects of a language such as High German, Low German, and Swiss German, or as London English and New York English. Genre may also reflect a specialized task, i.e. an informational kiosk for a railway station, for which a special set of words will be used most frequently by a user.

DEPR:

Although the invention will be described below in terms of Romance and Germanic languages with which the inventors are most familiar, ideographic languages such as Japanese, Chinese and Korean can be handled by this invention. Thus, the mechanism of this invention can be applied to any language, without regard to the alphabet or word form required for the human-readable printed symbols used for the respective languages.

DEPR:

Further, the invention is often described in terms that could be associated with a human operator. While the operations performed may be in response to user input, no action by a human operator is desirable in any of the operations described herein which form part of the present invention; the operations are machine operations processing electrical signals to generate other electrical signals.

DEPR:

As shown in FIG. 2, the kiosk 100 could have an octagonal shape about 10 feet in height with 8 stations 101, 102, 103 and 104 (others not shown) located around the periphery. Each of the stations would be configured generally as described above. For an information kiosk, the top of might be adorned with a large, white, animated question mark 105 on a blue background. Each of the 8 stations is equipped with a microphone for input and speakers, a display screen, printer, and so forth for output. The image on the display is of a person at a kiosk speaking into the microphone; its intention is to cue an individual who approaches the kiosk to speak into the microphone. Whenever this occurs, the kiosk determines what natural language was spoken, conditions itself for processing that language and responds in that spoken language; when needed, the display is utilized to provide a visual reference (like a map) labelled in the same language the individual and kiosk are using to communicate. For the machine or telephone kiosk, the physical units would likely vary; a FAX unit might be provided for output, for example.

DEPR:

While scholarly studies of the frequency of occurrence of spoken words have not been found by the inventors, they are familiar with a number of works which count the frequency for written documents. For example, from the "Frequency Dictionary of Italian Words," in the series, THE ROMANCE LANGUAGES AND THEIR STRUCTURES, directed by Alphonse Juilland and authored by Vincenzo Traversa, published by Mouton, The Hague, in 1973, it was determined that 148 of the words (or forms, meaning verb forms, adjective & adverb genders, etc) are responsible for 40% of the written language. That is, 199,443 of the tokens counted in the study of 500,000 Italian words, in 5 different

genre, were exactly these 148 words. It is important to understand what this statistic means, especially in a language like Italian. The verb "essere" which is used and occurs much as its corresponding verb, "to be", does in English, has a combined count of 12,272 occurrences. However, this does not mean that "essere" was counted that many times, but rather that "essere" plus all its forms were counted that many times. So while the form "era" was counted 1317 times, most of the 50 other forms, from "eran" to "fossi" to "sarete" and "sii," had very low occurrences. The 148 Italian words that are used in the dictionary for Italian recognition are words, or forms of words, whose lowest frequency of occurrence is quite high. A word that was counted exactly 500 times, for instance, has a frequency of occurrence in the language of 1 in 1000 or 0.1%. The first 5 words, "di," "e," "che," "la," and "il" have a combined occurrence of 54,657 or these words make up about 10.1% of the language, while each of the next five words make about 1% each so that the ten most common words in Italian comprise 16.2% of the written language.

DEPR:

Similar results were found for all the languages studied by the inventors; these results will hold for essentially all languages. Now for English, which is not an inflected language and has essentially no gender requirements, the ten most frequent words comprise fully 24.2% of the written language; achieving the 40% level requires only 47 words.

DEPR:

Table 1 below demonstrates why relatively few words are required to be in a word table. The data for Table 1 are taken from Computational Analysis of Present-day American English by H. Kucera and W. N. Francis and published by the Brown University Press, Providence, R.I., 1967. It lists the twelve most common words in written English in MEASURED FREQUENCY order from top to bottom. The MEASURED FREQUENCY is stated as the average count for each common word per 100 words used in the (written) English language, determined over the total word count in a very large number of English documents. Each CUMULATIVE FREQUENCY in Table 1 is the sum of the MEASURED FREQUENCIES for all words in the table from that point and above. Thus, in a representative sample of written English text, approximately 20% of the words in the text will be one of the first six words in Table 1; fully 26% will be one of the 12 words in the table. Thus, relatively few words represent a substantial portion of representative text. Similar tables showing similar statistics can be constructed for other languages.

DEPR:

In English, 46 words are adequate to give an approximate 40% coverage, whereas in Italian, 148 words are needed.

DEPR:

Thus, it can be inferred that the small language recognition dictionary must store about 3 times as many common Italian words to "know as much" Italian as it would know from only 47 English words. However, there is no requirement that precisely equal percentiles of words be kept so long as the language recognition, i.e. differentiation, was reliable.

DEPR:

However, spoken languages are typically further simplified by the native speakers and this is as true in Italian as it is in English.

DEPR:

This simplification of speech is very likely to reduce further the required vocabulary size for language recognition. In any case, the point of this discussion of Italian and English was to provide some

of the basic statistics; the statistic is that a very few words are very highly used in languages and if these can be recognized, the language can be recognized.

DEPR:

Further, if the kiosk will be used for a specific purpose, e.g., an information kiosk, a specialized dictionary can be developed for the task at hand. In the case of an information kiosk, interrogatives such as "Where", "How" and "What" are likely to be used at a greater frequency than their occurrence in the English language as a whole. Therefore, the small dictionaries for special purpose machines can be optimized. However, a general dictionary so long as it has sufficient coverage of the language is expected to perform adequately as well.

DEPR:

A short digression is required on genre which have been studied extensively because they are very similar to the idea of a limited universe of discourse for which a kiosk might be used. For given situations the vocabulary, regardless of how specialized it might be, will still have a set of words that will occur with a high frequency. If we consider focused discussions in medicine, engineering or philosophy, for example, a jargon exists and is used. This jargon may be taken as evidence that a set of highly used words (typically for the basic concepts and practices of the discipline) exist, and in the unlikely absence of the common words, this jargon will serve as the recognition vocabulary. However, even in the genre samples used in compiling the data for English, the high frequency words still have a high frequency of occurrence.

DEPR:

The study of American English, "Computational Analysis of Present-Day American English," by H. Kucera and W. N. Francis, Brown University Press, Providence, R.I., 1967, created a corpus (called The Corpus) of 1,014,232 words drawn from 500 samples of about 2000 words each in 15 different genre. The genre included press: reportage, editorial and reviews, five genre of fiction and one of humor among the 15 genres studied. The data establishes that there are the common words which are common across all genre.

DEPR:

The invention provides a device for people who speak one of 8 different languages, which they can use by speaking in their native language without prior conditioning of the device. "Prior conditioning" means using mechanical, electrical, electronic or other means to establish for the device, the natural language in which transactions will occur. For example, in South Texas and South Florida, among other places in the U.S., many personal banking machines, e.g., ATMs, present their users with a screen choice of "Espanol" or "English", while in Quebec, Canada, such devices present a choice of "Francois" or "English". In these cases, the customer is required to select a language or the accept the default, e.g., English, in the U.S.

DEPR:

Finally, the additional hardware represents an added cost, although in fairness to the ATM's, they are designed to re-use the same buttons with different display labels. This invention does the job better.

DEPR:

It should be noted that any known, or future developed, speech recognition tool, and if desired speech synthesis tool to respond to the user, can be used in the invention. The invention is directed at the problem of solving how a plurality of such memory and processor intensive tools can be automated on one or more machines, even a

personal computer class device.

DEPR:

As shown in FIG. 3, the utterance input module 151 accepts the detected spoken inquiry. Some preprocessing of the utterance is possible, e.g., stripping out background noise, separating the utterance into syllables, and so forth, but this will probably be minimal. The utterance input module 151 will forward the utterance to one or more speech recognition engines 161-168. In the figure, a separate speech engine is shown for each language. However, for the initial language recognition, it is possible to use a single speech recognition engine. In this case, the lightweight dictionaries may be augmented with some rules which are helpful for recognizing a particular language. Further, a speech recognition engine may be used for related languages. As shown in the figure, Italian, French, Spanish and Portuguese are Romance languages are grouped together, while English, Dutch, Danish and German are Germanic languages. Thus, there could be a single Romance language speech recognition engine and a Germanic language speech recognition engine in an alternative embodiment.

DEPR:

FIG. 4 is a flow diagram for one preferred method of operation for the multilingual kiosk. In step 201, the device is initialized. All eight of the speech engines are readied to accept an utterance input. The Language Recognition Dictionaries are loaded. The much larger Speech Recognition Dictionaries (SRD) and the Genre Recognition Dictionaries (GRD) are not. The GRDs are application specific words which are associated with the use of a more general purpose mechanism. In a train station, for example, "track", "depart" and "gate" may be more easily found or have alternative representation than in the SRDs. One of the larger dictionaries will come into play after the natural language has been determined, whereupon it will be loaded for the recognized language of the eight languages. These LRDs will be built from the most frequently occurring words in each of the languages. It is expected that the LRDs need only recognize fairly short utterances, at least for the initial transaction, the LRDs will contain enough words to provide recognition for 40 percent of each language. As noted in the Italian and English statistics above, for written languages, the upper bound will be somewhere from about 50 English words to 150 Italian words and will vary from language to language. For specialized dictionaries for specific tasks, it is also likely to vary. It is unlikely in the extreme that more than 300 words would be required to obtain this coverage for any language. Based on the inventors work, English, German, Dutch, Danish, French, Spanish, Portuguese and Italian can be easily supported by the invention. These represent the Romance and Germanic languages. Other language groups to support are the ideographic languages, i.e. Chinese, Japanese & Korean and the Slavic languages, e.g., Polish, Russian, Czech or Slovak.

DEPR:

For example, using English, this utterance, "Where is the swimming venue?", assuming error free speech recognition, would come out of the English speech engine with the LRD as "Where is the huh huh". Similarly, the utterance, "A che ora parte il treno per Dallas?" will come out of the English engine as, "A huh huh huh huh huh huh huh," and out of the Italian engine as "A che ora il huh per huh," and out of the French engine as, "A huh huh il huh huh huh." These examples assume that the speech engines match exactly based on spelling. While this is not precisely correct, it is an easy way to explain how the invention will work.

DETL:

TABLE 1 _____ The Twelve Most Common

English Words WORD MEASURED FREQUENCY CUMULATIVE FREQUENCY
 the 6.899 6.899 of 3.590
 10.489 and 2.845 13.334 to 2.578 15.912 a 2.291 18.203 in 2.104
 20.307 that 1.045 21.352 was 0.995 22.347 he 0.968 23.315 for 0.941
 24.256 it 0.936 25.192 with 0.863 26.055

DETL:

TABLE 2 _____ Text Units by Language
 _____ Utterance A che ora parte il
 treno per Dallas? Language Text Unit Italian A che ora huh il huh per
 huh Spanish A huh huh parte il huh huh huh French A huh huh huh il
 huh huh huh Portuguese A huh huh huh huh huh per huh English A huh
 huh huh huh huh huh Danish huh huh huh huh huh huh Dutch huh
 huh huh huh huh huh German huh huh huh huh huh huh

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
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Help Logout

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First Hit

Previous Document

Next Document

Full Title Citation Front Review Classification Date Reference Claims KMC

Document Number 1

Entry 1 of 61

File: USPT

May 16, 2000

US-PAT-NO: 6064732

DOCUMENT-IDENTIFIER: US 6064732 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pezzullo; William V.	Bromley	NC	N/A	N/A
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Johns; Joseph B.	Calgary	N/A	N/A	CAX
Orford; Kenneth M.	Kanata	N/A	N/A	CAX
Travis; Kristin J.	Nepean	N/A	N/A	CAX
Tsuji; Bruce H.	Nepean	N/A	N/A	CAX
Ross; William T.	Dunrobin	N/A	N/A	CAX
Robert; Andre J.	Woodlawn	N/A	N/A	CAX
Read; Clifford D.	Stittsville	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Northern Telecom Limited	N/A	N/A	N/A	CAX	03

APPL-NO: 8/ 986286

DATE FILED: December 6, 1997

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATION The present application is related to previously filed, commonly owned, U.S. patent application entitled "A METHOD OF OPERATING A MICROPROCESSOR CONTROLLED TELEPHONE SET", Ser. No. 08/354,658, filed on Dec. 13, 1994, in the name of Robert B. Turnbull et al, which is incorporated herein, by reference, and is a continuation of U.S. application Ser. No. 08/806,225 filed Feb. 24, 1997, abandoned, which is a continuation of U.S. application Ser. No. 08/354,599 filed Dec. 13, 1994, now U.S. Pat. No. 5,615,257 granted Mar. 25, 1997.

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: CA 2112757

FOREIGN-PRIORITY-APPL-DATE: January 4, 1994

INT-CL: [7] H04M 1/56, H04M 1/27, H04M 11/08

US-CL-ISSUED: 379/396; 379/93.17, 379/112, 379/201, 345/10

US-CL-CURRENT: 379/396; 345/10, 379/112, 379/201, 379/93.17

FIELD-OF-SEARCH: 379/396, 379/93.01, 379/90.01, 379/112, 379/201, 379/399, 379/932.14, 379/395, 379/215, 379/127, 379/351, 379/111,

379/93.23, 379/93.09, 379/93.17, 345/10, 345/123, 345/124, 345/130,
345/166, 345/168, 345/169, 345/172, 340/712

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4291198</u>	September 1981	Anderson et al.	379/201
<u>5027400</u>	June 1991	Baji et al.	455/3
<u>5164982</u>	November 1992	Davis	379/93.09
<u>5263084</u>	November 1993	Chaput et al.	379/215
<u>5392337</u>	February 1995	Baals et al.	379/396
<u>5402477</u>	March 1995	McMahan et al.	379/201
<u>5416831</u>	May 1995	Chewning, III et al.	379/201
<u>5438568</u>	August 1995	Weisser, Jr.	379/93.14
<u>5485505</u>	January 1996	Norman et al.	379/112
<u>5524146</u>	June 1996	Morrissey et al.	379/201
<u>5541986</u>	July 1996	Hou	379/201
<u>5592538</u>	January 1997	Kosowsky	379/93.17
<u>5615257</u>	March 1997	Pezullo et al.	379/201

ART-UNIT: 277

PRIMARY-EXAMINER: Zele; Krista

ASSISTANT-EXAMINER: Saint-Surin; Jacques M.

ATTY-AGENT-FIRM: Vigil; Thomas R. Weiss; Richard

ABSTRACT:

An interactive subscriber telephone terminal, comprising: a display screen; a plurality of temporarily definable response/data entry keys; and local control means for selectively causing the display screen and/or the response/data entry keys to be controlled by one of: remote signals transmitted to the terminal from a telephone switching office, and the local control means.

10 Claims, 17 Drawing figures

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC
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Document Number 1

Entry 1 of 61

File: USPT

May 16, 2000

DOCUMENT-IDENTIFIER: US 6064732 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

BSPR:

In the ESP market, ADSI capability opens the door to many potential display-based services, such as catalog shopping, home banking, entertainment reservations, and (combined with broadcast access) selection of pay television programs, as well as such information services as stock and weather reports.

BSPR:

And, third parties can immediately deploy display-based enhanced services, such as home banking, by building on interactive voice-response systems already located in their premises.

DRPR:

FIG. 3 is a diagrammatic summary of state machine (SM) interactions underlying the ADSI terminal and telephone network interactions;

DEPR:

The ADSI User Interface state machine (UISM) processes all remaining events of interest, routing them as appropriate to the softkey script or service script interpreter state machines. It maintains some of the state information for each of the associated state machines, and coordinates any communications between them. An additional sub-task of this state machine is to provide a digit collector mechanism.

DEPR:

The UISM activates and modifies the softkey state machine (SKSM) by routing softkey or cursor events to it. Only one invocation of an SKSM will ever exist at any one time. Even when a sub-script is specified, it is not executed until after the current script has been completed. Practically speaking each invocation of the SKSM has a short life. It lives only until the end of the script or until the user goes on-hook, with virtually every command being immediately executable. The only exception is "Dial Tone Detect", which has a 3 second time-out.

DEPR:

The FDM Service Script state machine (FSSM) is activated by softkey events when the FDM UI state is active, as determined by the UISM. Network, timer, hookswitch and softkey script events may modify the sequence of a service script and the state of the FSSM. As with the SKSM, only the service script may be active at one time, however, many sub-scripts may be nested so the FSSM must maintain state information for every level of sub-script.

DEPR:

ADSI services enable subscribers to access and control such services as home banking, and to interact with display and audio information from a switch or server.

DEPR:

To compete successfully operating companies are seeking cost-effective terminals to support the variety of new services now being introduced. Cost considerations are critical particularly in lease markets because operating companies must assume virtually all of the technology risk. Compared with consumers who buy terminals, leasers are less likely to retain their telephones because they do not have to make capital investments to replace them. Because operating companies assume the technology risk in a lease market, the impact of service and terminal evolution on consumers is minimal. The major issue for users is integrating the many available leased and retail products, such as telephones and answering machines, into one cost-effective communications platform.

DEPV:

ADSI User Interface State Machine (SM);

DEPV:

Display information in English, French, or Spanish;

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC

Document Number 1

Entry 1 of 56

File: USPT

May 16, 2000

US-PAT-NO: 6064732

DOCUMENT-IDENTIFIER: US 6064732 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pezzullo; William V.	Bromley	NC	N/A	N/A
Brisebois; Michel J.	Chelsea	N/A	N/A	CAX
Johns; Joseph B.	Calgary	N/A	N/A	CAX
Orford; Kenneth M.	Kanata	N/A	N/A	CAX
Travis; Kristin J.	Nepean	N/A	N/A	CAX
Tsuji; Bruce H.	Nepean	N/A	N/A	CAX
Ross; William T.	Dunrobin	N/A	N/A	CAX
Robert; Andre J.	Woodlawn	N/A	N/A	CAX
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FOREIGN-PRIORITY-APPL-NO: CA 2112757

FOREIGN-PRIORITY-APPL-DATE: January 4, 1994

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US-CL-ISSUED: 379/396; 379/93.17, 379/112, 379/201, 345/10

US-CL-CURRENT: 379/396; 345/10, 379/112, 379/201, 379/93.17

FIELD-OF-SEARCH: 379/396, 379/93.01, 379/90.01, 379/112, 379/201, 379/399, 379/932.14, 379/395, 379/215, 379/127, 379/351, 379/111,

5,590,189

379/93.23, 379/93.09, 379/93.17, 345/10, 345/123, 345/124, 345/130,
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<u>5541986</u>	July 1996	Hou	379/201
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ART-UNIT: 277

PRIMARY-EXAMINER: Zele; Krista

ASSISTANT-EXAMINER: Saint-Surin; Jacques M.

ATTY-AGENT-FIRM: Vigil; Thomas R. Weiss; Richard

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Document Number 1

Entry 1 of 56

File: USPT

May 16, 2000

DOCUMENT-IDENTIFIER: US 6064732 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

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Display information in English, French, or Spanish;

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01598746 Supplier Number: 42415107 (THIS IS THE FULLTEXT)

AT&T Announces New Packet Switch, Pay Phone 10/02/91

Newsbytes, pN/A

Oct 2, 1991

Language: English Record Type: Fulltext

Document Type: Newswire; General Trade

Word Count: 155

TEXT:

MORRISTOWN, NEW JERSEY, U.S.A., 1991 OCT 2 (NB) -- AT&T has announced a new packet switch, the BNS-1000, which can handle up to 15,000 simultaneous two-way connections, as well as a new pay phone which can work with computers.

The new switch supports frame relay, X.25, and HDLC protocols and can be used to connect local area networks to corporate private networks. The new product line also includes network routers, gateways, and a network management system.

The pay phone, called the Public Phone 2000, includes a plug for laptop PCs or fax machines as well as a keyboard like those on automated teller machines, through which customers could get electronic mail or link to other dial-up services through their home or offices. The phones, which also offer foreign language services, are already being used at the Dallas/Fort Worth International Airport.

(Dana Blankenhorn/19911002/Press Contact: AT&T, Ray Zardetto, 201-606-2454)

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NEW AT&T PAY PHONE OF TOMORROW ANNOUNCED TODAY

DATE: October 2, 1991

13:06 EDT

WORD COUNT: 2,092

NEW ORLEANS, Oct. 2 /PRNewswire/ -- AT&T (NYSE: T) today announced the pay phone of tomorrow -- a public phone that can function as a "portable office" for travelers on the road.

The AT&T Public Phone 2000, designed by AT&T Bell Laboratories, gives business travelers an array of communication and information services never before available from a pay phone (pending FCC approval).

Equipped with a dataport, the new phone enables travelers to plug in their laptop computers or portable fax machines. In addition, the AT&T Public Phone 2000 features an optional built-in keyboard for travelers to access their electronic mail or any dial-up home or office databases. The keyboard rental fee is \$2.50 for the first 10 minutes and \$1 for each additional 10 minutes.

The phone's nine-inch color monitor displays high-resolution graphics and text. Both the screens and functions keys work in the same manner as automated teller machines, making the phone easy to operate. A special feature, foreign language screens, provides dialing instructions in French, Spanish and German.

The first information service to be offered on the AT&T Public Phone 2000 is for weather. This on-line service graphically provides current weather information, by state or nationwide. Callers also will receive two-day and five-day forecasts. The cost is \$.75 for state information, \$.95 for national.

The phone provides speed-dial access to travel and reservation services and to the following AT&T services:

-- AT&T EasyLink Service, an electronic mail service.

-- AT&T Language Line Service, a telephone-based language interpretation service.

-- AT&T Message Service, which allows callers to record one-minute messages in their own voice for delivery to any phone within one week.

"People walking up to the AT&T Public Phone 2000 will encounter a new era of public telephone communication," said Dennis Corrigan, AT&T national public phone manager. "We're giving our customers the same access to sophisticated services on the road that they have come to expect in their office. And, though it's the pay phone of the future, it's easy for anyone to use today."

The AT&T Public Phone 2000 also offers services for travelers with special needs. It is hearing-aid compatible and its keyboard can be used, free of charge, as a telecommunications device for the deaf (TDD).

In addition, where available, the phone provides speed-dial access to AT&T Dual Party Relay Service, which allows hearing- and speech-impaired TDD users to communicate with hearing callers with the help of an AT&T communications assistant.

All the traditional voice services currently available on public phones are accessible on the new phone, including calling card and operator assisted calls, such as collect and bill to third party. In addition, travelers can insert any of the AT&T Calling Cards, including the AT&T Universal Card, as well as most commercial credit cards, rather than manually key in their card numbers.

These phones are designed to replace existing AT&T Card Caller Public Phones in airports, hotels and convention centers. Initially

tested in Newark Airport in New Jersey and John F. Kennedy Airport in New York, the Public Phone 2000 is scheduled to be installed in several additional locations before the end of the year, including: Dallas/Fort Worth International Airport, Orlando International Airport and San Francisco International Airport.

When fully deployed, the new phones are expected to be in 85 of the top 100 airports, in nine of the top 10 hotel chains and in most major convention centers.

HIGHLIGHTS IN PAY PHONE HISTORY

-- Pay telephone stations preceded the invention of the pay phone and existed as early as 1878. These stations were supervised by telephone company attendants or agents (such as an employee in a hotel where a station might be located) who collected the money due after people made their calls. Some pay stations utilized a fail-safe collection method: After making the connections for customers, attendants would lock them in booths so they couldn't leave without paying.

-- In 1889, the first public coin telephone was installed by inventor William Gray at a bank in Hartford, Conn. It was a "postpay" machine, (coins were deposited after the call was placed). Gray's previous claim to fame was inventing the inflatable chest protector for baseball.

-- In 1898, the Western Electric No. 5 Coin Collector, the first automatic "prepay" station, went into use in Chicago. The depositing of coins before placing a call would gradually become the norm in pay phones until the introduction of "dial tone first" service in 1966.

-- By 1902, there were 81,000 pay telephones in the United States.

-- In 1905, the first outdoor Bell System coin telephone was installed on a Cincinnati street. It wasn't an instant hit; people apparently were reluctant to make private calls on a public thoroughfare.

(Moose were not as shy when they first encountered outdoor pay phones. When Bell Laboratories designed a new glass and aluminum outdoor telephone booth in the 1950s, it was a great advancement over the wooden outdoor booths that had been in use for a number of years. And yet several booths ordered by the U.S. National Park Service were found mysteriously broken and battered. Park rangers soon knew the answer, though: It was mating season for moose. Amorous -- but territorial -- bulls were charging the booths whenever they saw their reflections in the glass.)

-- In 1910, Western Electric and Gray Telephone Pay Station Co. signed an agreement for Gray to manufacture coin collectors for the Bell System using both Gray and Western Electric patents.

-- The result of that agreement, the 50A coin collector, went into production in 1911. By the end of 1912, 25,000 of these coin telephones had been ordered for New York City alone. The 50A model had three coin slots -- for nickels, dimes and quarters -- and was a "prepay" machine. The basic design, though often modified, was so practical and reliable it remained in production until 1964. In 1965, Western Electric introduced the 50A's successor. Among other things, it had a single coin slot instead of three, and electronic signalling of coins deposited replaced mechanical bells.

-- The booths that house pay phones have undergone more design changes than the phones themselves. At the turn of the century, indoor booths were constructed of durable hardwood, such as mahogany, with comfort and privacy in mind, and exhibited detailed craftsmanship. They were often carpeted.

The "original" telephone booth is credited to Thomas Watson, the man, who helped Alexander Graham Bell invent the telephone. Watson's "booth" was made by draping blankets over the furniture in his room and crawling underneath to conduct early telephone experiments. One story says that Watson, in order to hear, was insulating himself from street noises. Another story is that his landlady ordered Watson to be quieter; his shouting, albeit for the sake of science, was disturbing other boarders.

In 1883 Watson designed a real booth. It was built of expensive wood, had a domed top with a ventilator, windows with screens, and a desk with pen and ink.

Over the years, telephone booths have reflected their surroundings as well as the times. There have been phone booths resembling cable cars in San Francisco, and others resembling pagodas in New York City's Chinatown district. In the 1960s, as American architects designed glass-wall office buildings, wooden phone booths looked out of place in lobbies. Bell Laboratories designed an indoor glass and metal phone booth to better fit newer surroundings.

Not all of the designs for phone booths have reached the market. An experimental "hands-free" booth in 1972 featured a microphone in front of the caller and a loudspeaker in the booth's ceiling. Observers noted that people readily tried the new arrangement but that, conditioned to speaking in the direction another voice is coming from, they were all shouting into the ceiling.

-- In 1950, the first coin telephone mobile train service was established on the Pennsylvania Railroad between New York and Washington.

-- "Calling from your car" was first tested in Mobile, Ala., and Chicago in 1957. Drive-up pay telephones proved popular and are still in use today.

-- In 1960, the Bell System installed its one millionth pay telephone.

-- In 1964, when the U.S. Treasury Department decided to change the metallic composition of U.S. coins, it consulted with Bell Laboratories to ensure the new coins would still function properly in pay phones.

-- "Dial tone first" service was introduced in 1966 in Hartford, Conn. This essentially turned coin phones into emergency call stations because such calls could be made without first depositing coins.

-- In 1977, "automatic coin telephone service" was introduced in Phoenix, Ariz. This allowed most pay telephone calls, including long-distance, to be made without operator assistance. A computer-controlled synthesized voice gave customers the necessary instructions.

-- AT&T introduced "Charge-a-Call," a "coinless" pay phone, in 1978 (and the term "pay phone" began to replace "coin phone").

-- In 1984, AT&T introduced the AT&T Card Caller, which featured a video screen with dialing instructions and allowed customers to charge calls by inserting an AT&T Calling Card. The Card Caller also was the first of AT&T's public phones to feature a "loud" button, which allows callers to control the listening volume. It helps the hearing-impaired as well as those having a hard time hearing because of environmental noise.

-- In 1990, AT&T introduced the AT&T Public Phone 1000, which features a data port for laptop computer and portable fax use, speed dialing for select AT&T services and travelers assistance. This

tabletop phone was designed primarily for airline lounges and hotels.

-- The latest advance in pay phone technology is the AT&T Public Phone 2000. Introduced in the fall of 1991, the Public Phone 2000 has a built-in keyboard, a data port and a nine-inch color monitor. Besides offering all the traditional voice services, it enables travelers to use an array of services never before available from a pay phone. Public Phone 2000 users can access electronic mail and online databases, connect a portable fax machine or computer, obtain language translation services, speed-dial travel assistance services and even get weather forecasts.

AT&T PUBLIC PHONE 2000 FACT SHEET

The AT&T Public Phone 2000, designed by AT&T Bell Laboratories, offers an array of communication and information services never before available from a pay phone. These special features and services enable the Public Phone 2000 to operate as a state-of-the-art telephone as well as a temporary "office" for the business traveler.

Features:

-- data port: connects laptop computers, portable facsimile machines or TDD (Telecommunications Device for the Deaf) terminals to the phone

-- built-in keyboard: allows access to computer and database services and acts as a TDD

-- nine-inch color monitor: offers high resolution display of graphics and text

-- on-screen dialing instructions: available in four languages (English, French, German, Spanish)

-- hearing aid compatibility: the blue grommet on the phone cord identifies the phone as hearing aid compatible.

-- menu-driven function buttons: enable the Public Phone 2000 to be operated in the same manner as automated teller machines

Services:

VOICE SERVICES: Calls can be placed on the AT&T Network using all AT&T Calling Cards -- including the AT&T Universal Card, most major credit cards, local telephone company cards or operator assistance service.

DATA SERVICES: Using either the Public Phone 2000 keyboard or the data port hook-up for laptop computers, business travelers have the ability to connect to their electronic mail service as well as any dial-up database.

SPECIAL NEEDS SERVICES: The Public Phone 2000 is hearing aid compatible, provides TDD access and Dual Party Relay service (not available in all states).

TRAVEL ASSISTANCE SERVICES: Travelers can speed-dial hotels, airlines and rental car reservation numbers. Callers can also access AT&T Language Line(A) (a telephone-based interpretation service), or use AT&T Message Service to record one-minute messages for delivery to any phone within one week.

INFORMATION SERVICES: Weather information is provided on a state-by-state or nationwide basis. Additional information services will be implemented periodically.

Pricing:

0+ calls: Standard AT&T rates apply for Public Phone 2000 0+ calls

Keyboard Rental: \$2.50 for first 10 minutes(B)
\$1 each additional 10-minute period(B)
Keyboard is free for TDD users. They will only
pay for the phone call.

Weather Information Service: \$.75 for each state map
\$.95 for a national map
\$1.70 for one state and national map
combination

For additional information call, 800-922-0086.

(A) Registered mark of AT&T.

(B) This fee is in addition to the cost of the call.
/delval/

CONTACT: Nancy J. Smith of AT&T, 215-557-4322, or 717-975-6556,
or, home, 717-737-2045

(T)

COMPANY NAME: AT&T; AT&T BELL LABORATORIES
TICKER SYMBOL: T (NYS)
PRODUCT: TELECOMMUNICATIONS (TLS)
STATE: PENNSYLVANIA (PA)
SECTION HEADING: BUSINESS; TECHNOLOGY

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Document Number 52

Entry 52 of 61

File: USPT

Nov 5, 1996

US-PAT-NO: 5572572

DOCUMENT-IDENTIFIER: US 5572572 A

TITLE: Computer and telephone apparatus with user friendly interface
and enhanced integrity features

DATE-ISSUED: November 5, 1996

INVENTOR-INFORMATION:

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ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Transaction Technology, Inc.	Santa Monica	CA	N/A	N/A	02

APPL-NO: 8/ 213791

DATE FILED: March 16, 1994

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is a
continuation of Ser. No. 08/084,319, filed Jun. 30, 1993, which is a
continuation of Ser. No. 433,825, filed Nov. 9, 1989 (now abandoned);*abandoned*

and a continuation of Ser. No. 08/104,931, filed Aug. 12, 1993 (now U.S. Pat. No. 5,321,804), which is a continuation of Ser. No. 07/439,739, filed Nov. 21, 1991 (now abandoned), which is a continuation-in-part of Ser. No. 07/260,832, filed Oct. 21, 1988 (now U.S. Pat. No. 5,008,927), which is a continuation-in-part of Ser. No. 07/190,440, filed May 5, 1988 (now U.S. Pat. No. 4,991,199), all of which are incorporated herein by reference in their entirety.

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"Data Networks", D. Bertsekas et al., 1987, 3 pp.

"Airline Credit Union Ready for Takeoff with Electronic and Telephone Banking: Northwest's Far-Flung Employees Will Get Alternatives to Busy Signal" American Banker, May 15, 1985, 3 pp.

"Over 100 Shared Automatic Teller Machine (ATM) Networks are Operating in the U.S.," Economist, Mar. 27, 1982, 1 p.

"MCI Communications Venture to be Delayed Until Next Year: Company Had Planned to Introduce System Last Month" American Banker, Jun. 28, 1984, 2 pp.

"The Delicate Balance of ATM Industry Standards," Levy, J., The EFT Sourcebook, 1st Ed., 1988, pp. 35-168, Table 1-4.

"Is Home Banking for Real?" Datamation, vol. 32, Sep. 15, 1986, 6 pp.

"Case Study: The Cirrus Banking Network," Communications of the ATM, vol. 28, No. 8, Aug. 1985, pp. 798-807.

"NBD Offers Electronic Highway for Network of Shared ATMs", American Banker, Apr. 11, 1984, 3 pp.

"Low-Cost Computer Terminal Designed for Home Banking," American Banker, Apr. 4, 1984, 2 pp.

"Viewtron Entering Pittsburgh in Deal with Dollar Bank," Pittsburgh Press, Aug. 12, 1985, 3 pp.

ART-UNIT: 268
PRIMARY-EXAMINER: Chan; Wing F.
ATTY-AGENT-FIRM: Hogue, Sr.; Dale Curtis

ABSTRACT:

A telephone configures as a programmable microcomputer (telephone-computer) which operates in most circumstances through a standard telephone 12-key keypad input. The telephone-computer has the overall appearance of a telephone and includes telephone electronics and a microprocessor unit operated in conjunction with other computer elements, including memory devices, a programmable gate array (PGA) chip which can be initially programmed and then fixed, and enhanced integrity features. The PGA has the capability of being configured to accommodate various types of software which require different hardware Configuration, but without actually reconfiguring the hardware. The telephone-computer delivers data processing capabilities and services through an ordinary telephone instrument via conventional telephone lines with a network host computer which communicates with a vast panoply of service bureaus. Specifically, operating software is downloaded to the telephone-computer by the network host computer to format the microcomputer to conform to the software format used by the service bureaus.

98 Claims, 24 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC
Help					Logout				

[Help](#)
[Logout](#)

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
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[First Hit](#)
[Previous Document](#)
[Next Document](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMMC
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Document Number 52

Entry 52 of 61

File: USPT

Nov 5, 1996

DOCUMENT-IDENTIFIER: US 5572572 A

TITLE: Computer and telephone apparatus with user friendly interface and enhanced integrity features

BSPR:

Various firms, including AT&T and Sears, Roebuck & Co., have provided home banking services employing home terminals which communicate with bank service computers. These have either involved "dumb terminals", i.e., terminal devices having no intelligence, or conventional PC's. Nether system is fully user-friendly, as desired according to the invention, since both require some computer literacy on the part of the user.

BSPR:

It will also be appreciated that in recent years banking customers have increasingly become accustomed to using automatic teller machine devices (ATMs). These have been relatively successful because they provide simple and clear "menu" of choices to the consumer at each step of each transaction, such that the customer is very readily led through the sequence of inputs required by the system to respond to the customer's request. It would be desirable if such functions could also be carried out by the consumer in the privacy of his own home, thus rendering the service more convenient and thus more likely to be commonly used. The present telephone-computer was developed exactly for the purpose of providing a readily available user-friendly microcomputer with the familiar appearance of a standard table telephone.

BSPR:

Such automatic teller machines typically operate using software prepared by individual programmers using personal computers. Typically, these personal computers are those manufactured by the IBM Corporation (the "IBM PC") or so-called "clones" thereof. As such, these computers run various software programs which conform to IBM's standards for such personal computers. While such a requirement places various substantial constraints on the computer user, particularly concerning memory access and the like, at this time the IBM "PC" is so thoroughly entrenched throughout industry that it is most unlikely that any change can be made. More particularly, any home terminal or computer intended to be employed with a banking system now operating must emulate the IBM PC "architecture"; further details of this requirement are given below.

DEPR:

FIG. 9 depicts the basic structure of the hardware of the telephone-computer unit. As stated above, the device of the invention includes four basic elements (1) the telephone electronics, generally indicated at 29, (2) a programmable gate array (PGA), generally indicated at 30, (3) a primary microprocessor with memory, also

generally indicated at 30, and (4) a modem 27. The telephone electronics provides input to the primary microprocessor of the invention and also acts as a telephone. The primary microprocessor itself includes an 8086 compatible central processing unit and is compatible with the standard International Business Machine (IBM) PC/XT at the BIOS level.

DEPR:

More particularly, suppose the user desires to access the service computer 80a of a particular bank A. When he activates his home telephone-computer 2, there will appear on a display screen 4 a menu allowing him to select "Access Bank Services" by pressing, for example, the "3" button on the keypad 3. If he does so, the telephone-computer 2 will send a message to the network host computer 68. This will in turn consult its internal memory to locate the application program required to access the service computer 80a of bank A and will download this to the home telephone-computer 2. The home telephone-computer will in turn operate using this program and will ask the user various questions required to prompt the user to input the information needed to access his account at the bank --for example, his account number, his secret access code, the type of transaction desired, the amount of deposit, withdrawal, or transfer required, and so on. This information is then transferred from the home telephone-computer 2 to the network host computer 68 in a message having a first protocol. The network host computer transforms this information into whatever second protocol is conventionally required to communicate with the service computer 80a, for example, in the precise manner according to which automatic teller machines communicate with it. If on the other hand the consumer desired to access Bank B, typically the consumer will be asked the same questions by way of prompts, but the network host computer will transform the answers into a somewhat different protocol required to access the service computer 80b of Bank B.

ORPL:

"Electronic Apparatus", Japanese Publication No. vol. .3, No. 36 (P-103), Mar. 27, 1978.

ORPL:

"Reset Preventing System of Microprocessor", Japanese Publication No. vol. 112 (P-124) (990), Jun. 23, 1982.

ORPL:

"Compuserve Home Banking System Offered in Maschusetts, Ohio," American Banker, Sep. 22, 1982, p. 9.

ORPL:

"New Jersey Shared ATm Network Will Offer Home Banking Service Through Videx Test," American Banker, Jul. 14, 1982, p. 8.

ORPL:

"Electronic Networks Springing Up All Over: Systems Linking Automated Teller Machines, Point of Sale Devices Are Established or Contemplated in Several Areas of The Country," American Banker, Mar. 19, 1992, 3 pp.

ORPL:

"Home Banking is Micro Friendly," American Banker, Jul. 13, 1983, 2 pp.

ORPL:

"Over 100 Shared Automatic Teller Machine (ATM) Networks are Operating in the U.S.," Economist, Mar. 27, 1982, 1 p.

ORPL:

"The Delicate Balance of ATM Industry Standards," Levy, J., The EFT Sourcebook, 1st Ed., 1988, pp. 35-168, Table 1-4.

ORPL:

"Is Home Banking for Real?" Datamation, vol. 32, Sep. 15, 1986, 6 pp.

ORPL:

"Case Study: The Cirrus Banking Network," Communications of the ATM, vol. 28, No. 8, Aug. 1985, pp. 798-807.

ORPL:

"NBD Offers Electronic Highway for Network of Shared ATMs", American Banker, Apr. 11, 1984, 3 pp.

ORPL:

"Low-Cost Computer Terminal Designed for Home Banking," American Banker, Apr. 4, 1984, 2 pp.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
-----------	-------------	------------	----------------	----------------	-------------------

First Hit	Previous Document	Next Document
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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KVMC
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Help

Logout

5/29.10

WEST

[Help](#)[Logout](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Generate Collection](#)

Search Results - Record(s) 1 through 10 of 61 returned.

☐ 1. Document ID: US 6064732 A

Entry 1 of 61

File: USPT

May 16, 2000

US-PAT-NO: 6064732

DOCUMENT-IDENTIFIER: US 6064732 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 2. Document ID: US 6061665 A

Entry 2 of 61

File: USPT

May 9, 2000

US-PAT-NO: 6061665

DOCUMENT-IDENTIFIER: US 6061665 A

TITLE: System, method and article of manufacture for dynamic negotiation of a network payment framework

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 3. Document ID: US 6061646 A

Entry 3 of 61

File: USPT

May 9, 2000

US-PAT-NO: 6061646

DOCUMENT-IDENTIFIER: US 6061646 A

TITLE: Kiosk for multiple spoken languages

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 4. Document ID: US 6049782 A

Entry 4 of 61

File: USPT

Apr 11, 2000

US-PAT-NO: 6049782

DOCUMENT-IDENTIFIER: US 6049782 A

TITLE: Relationship management system and process for pricing financial instruments based on a customer's relationship with a financial institution

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 5. Document ID: US 6047887 A

Entry 5 of 61

File: USPT

Apr 11, 2000

US-PAT-NO: 6047887

DOCUMENT-IDENTIFIER: US 6047887 A

TITLE: System and method for connecting money modules

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 6. Document ID: US 6047067 A

Entry 6 of 61

File: USPT

Apr 4, 2000

US-PAT-NO: 6047067

DOCUMENT-IDENTIFIER: US 6047067 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 7. Document ID: US 6035275 A

Entry 7 of 61

File: USPT

Mar 7, 2000

US-PAT-NO: 6035275

DOCUMENT-IDENTIFIER: US 6035275 A

TITLE: Method and apparatus for executing a human-machine dialogue in the form of two-sided speech as based on a modular dialogue structure

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 8. Document ID: US 6026379 A

Entry 8 of 61

File: USPT

Feb 15, 2000

US-PAT-NO: 6026379

DOCUMENT-IDENTIFIER: US 6026379 A

TITLE: System, method and article of manufacture for managing transactions in a high availability system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 9. Document ID: US 6016484 A

Entry 9 of 61

File: USPT

Jan 18, 2000

US-PAT-NO: 6016484

DOCUMENT-IDENTIFIER: US 6016484 A

TITLE: System, method and article of manufacture for network electronic payment instrument and certification of payment and credit collection utilizing a payment

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 10. Document ID: US 6012050 A

Entry 10 of 61

File: USPT

Jan 4, 2000

US-PAT-NO: 6012050

DOCUMENT-IDENTIFIER: US 6012050 A

TITLE: Multi-transaction service system

[Help](#)[Logout](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Generate Collection](#)**Search Results - Record(s) 11 through 20 of 61 returned.**☐ 11. Document ID: US 6003019 A

Entry 11 of 61

File: USPT

Dec 14, 1999

US-PAT-NO: 6003019

DOCUMENT-IDENTIFIER: US 6003019 A

TITLE: Multi-transaction service system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 12. Document ID: US 6002767 A

Entry 12 of 61

File: USPT

Dec 14, 1999

US-PAT-NO: 6002767

DOCUMENT-IDENTIFIER: US 6002767 A

TITLE: System, method and article of manufacture for a modular gateway server architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 13. Document ID: US 5996076 A

Entry 13 of 61

File: USPT

Nov 30, 1999

US-PAT-NO: 5996076

DOCUMENT-IDENTIFIER: US 5996076 A

TITLE: System, method and article of manufacture for secure digital certification of electronic commerce

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 14. Document ID: US 5990927 A

Entry 14 of 61

File: USPT

Nov 23, 1999

US-PAT-NO: 5990927

DOCUMENT-IDENTIFIER: US 5990927 A

TITLE: Advanced set top terminal for cable television delivery systems

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 15. Document ID: US 5987140 A

Entry 15 of 61

File: USPT

Nov 16, 1999

US-PAT-NO: 5987140

DOCUMENT-IDENTIFIER: US 5987140 A

TITLE: System, method and article of manufacture for secure network electronic payment and credit collection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMOC	Image
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☐ 16. Document ID: US 5987132 A

Entry 16 of 61

File: USPT

Nov 16, 1999

US-PAT-NO: 5987132

DOCUMENT-IDENTIFIER: US 5987132 A

TITLE: System, method and article of manufacture for conditionally accepting a payment method utilizing an extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMOC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 17. Document ID: US 5982891 A

Entry 17 of 61

File: USPT

Nov 9, 1999

US-PAT-NO: 5982891

DOCUMENT-IDENTIFIER: US 5982891 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMOC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 18. Document ID: US 5983208 A

Entry 18 of 61

File: USPT

Nov 9, 1999

US-PAT-NO: 5983208

DOCUMENT-IDENTIFIER: US 5983208 A

TITLE: System, method and article of manufacture for handling transaction results in a gateway payment architecture utilizing a multichannel, extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMOC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 19. Document ID: US 5978840 A

Entry 19 of 61

File: USPT

Nov 2, 1999

US-PAT-NO: 5978840

DOCUMENT-IDENTIFIER: US 5978840 A

TITLE: System, method and article of manufacture for a payment gateway system architecture for processing encrypted payment transactions utilizing a multichannel, extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMOC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 20. Document ID: US 5963924 A

Entry 20 of 61

File: USPT

Oct 5, 1999

US-PAT-NO: 5963924

DOCUMENT-IDENTIFIER: US 5963924 A

TITLE: System, method and article of manufacture for the use of payment instrument holders and payment instruments in network electronic commerce

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image
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Generate Collection

Terms	Documents
l2 and (atm or automated teller machine)	61

Display 10 Documents

including document number

21

Display Format:

TI

Change Format

Main Menu

Search Form

Posting Counts

Show S Numbers

Edit S Numbers

Help

Logout

WEST

[Help](#)[Logout](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Generate Collection](#)

Search Results - Record(s) 21 through 30 of 61 returned.

☐ 21. Document ID: US 5963925 A

Entry 21 of 61

File: USPT

Oct 5, 1999

US-PAT-NO: 5963925

DOCUMENT-IDENTIFIER: US 5963925 A

TITLE: Electronic statement presentment system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 22. Document ID: US 5963648 A

Entry 22 of 61

File: USPT

Oct 5, 1999

US-PAT-NO: 5963648

DOCUMENT-IDENTIFIER: US 5963648 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 23. Document ID: US 5953423 A

Entry 23 of 61

File: USPT

Sep 14, 1999

US-PAT-NO: 5953423

DOCUMENT-IDENTIFIER: US 5953423 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 24. Document ID: US 5949876 A

Entry 24 of 61

File: USPT

Sep 7, 1999

US-PAT-NO: 5949876

DOCUMENT-IDENTIFIER: US 5949876 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 25. Document ID: US 5943424 A

Entry 25 of 61

File: USPT

Aug 24, 1999

US-PAT-NO: 5943424

DOCUMENT-IDENTIFIER: US 5943424 A

TITLE: System, method and article of manufacture for processing a plurality of transactions from a single initiation point on a multichannel, extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 26. Document ID: US 5931917 A

Entry 26 of 61

File: USPT

Aug 3, 1999

US-PAT-NO: 5931917

DOCUMENT-IDENTIFIER: US 5931917 A

TITLE: System, method and article of manufacture for a gateway system architecture with system administration information accessible from a browser

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 27. Document ID: US 5920629 A

Entry 27 of 61

File: USPT

Jul 6, 1999

US-PAT-NO: 5920629

DOCUMENT-IDENTIFIER: US 5920629 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 28. Document ID: US 5917615 A

Entry 28 of 61

File: USPT

Jun 29, 1999

US-PAT-NO: 5917615

DOCUMENT-IDENTIFIER: US 5917615 A

TITLE: System and method for facsimile load balancing

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 29. Document ID: US 5917912 A

Entry 29 of 61

File: USPT

Jun 29, 1999

US-PAT-NO: 5917912

DOCUMENT-IDENTIFIER: US 5917912 A

TITLE: System and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 30. Document ID: US 5915019 A

Entry 30 of 61

File: USPT

Jun 22, 1999

US-PAT-NO: 5915019

DOCUMENT-IDENTIFIER: US 5915019 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

WEST

[Help](#)[Logout](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Generate Collection](#)

Search Results - Record(s) 31 through 40 of 61 returned.

☐ 31. Document ID: US 5915246 A

Entry 31 of 61

File: USPT

Jun 22, 1999

US-PAT-NO: 5915246

DOCUMENT-IDENTIFIER: US 5915246 A

TITLE: Self-service system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 32. Document ID: US 5910987 A

Entry 32 of 61

File: USPT

Jun 8, 1999

US-PAT-NO: 5910987

DOCUMENT-IDENTIFIER: US 5910987 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 33. Document ID: US 5905865 A

Entry 33 of 61

File: USPT

May 18, 1999

US-PAT-NO: 5905865

DOCUMENT-IDENTIFIER: US 5905865 A

TITLE: Apparatus and method of automatically accessing on-line services in response to broadcast of on-line addresses

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 34. Document ID: US 5898154 A

Entry 34 of 61

File: USPT

Apr 27, 1999

US-PAT-NO: 5898154

DOCUMENT-IDENTIFIER: US 5898154 A

TITLE: System and method for updating security information in a time-based electronic monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 35. Document ID: US 5892900 A

Entry 35 of 61

File: USPT

Apr 6, 1999

US-PAT-NO: 5892900

DOCUMENT-IDENTIFIER: US 5892900 A

TITLE: Systems and methods for secure transaction management and electronic rights protection

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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☐ 36. Document ID: US 5889863 A

Entry 36 of 61

File: USPT

Mar 30, 1999

US-PAT-NO: 5889863

DOCUMENT-IDENTIFIER: US 5889863 A

TITLE: System, method and article of manufacture for remote virtual point of sale processing utilizing a multichannel, extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-------

☐ 37. Document ID: US 5873068 A

Entry 37 of 61

File: USPT

Feb 16, 1999

US-PAT-NO: 5873068

DOCUMENT-IDENTIFIER: US 5873068 A

TITLE: Display based marketing message control system and method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-------

☐ 38. Document ID: US 5850446 A

Entry 38 of 61

File: USPT

Dec 15, 1998

US-PAT-NO: 5850446

DOCUMENT-IDENTIFIER: US 5850446 A

TITLE: System, method and article of manufacture for virtual point of sale processing utilizing an extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-------

☐ 39. Document ID: US 5838812 A

Entry 39 of 61

File: USPT

Nov 17, 1998

US-PAT-NO: 5838812

DOCUMENT-IDENTIFIER: US 5838812 A

TITLE: Tokenless biometric transaction authorization system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-------

☐ 40. Document ID: US 5828840 A

Entry 40 of 61

File: USPT

Oct 27, 1998

US-PAT-NO: 5828840

DOCUMENT-IDENTIFIER: US 5828840 A

TITLE: Server for starting client application on client if client is network terminal and initiating client application on server if client is non network terminal

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KVMC	Image
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Generate Collection

Terms	Documents
l2 and (atm or automated teller machine)	61

Display 10 Documents

including document number

41

Display Format:

TI

Change Format

Main Menu

Search Form

Posting Counts

Show S Numbers

Edit S Numbers

Help

Logout

[Help](#)[Logout](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Generate Collection](#)

Search Results - Record(s) 41 through 50 of 61 returned.

☐ 41. Document ID: US 5826102 A

Entry 41 of 61

File: USPT

Oct 20, 1998

US-PAT-NO: 5826102

DOCUMENT-IDENTIFIER: US 5826102 A

TITLE: Network arrangement for development delivery and presentation of multimedia applications using timelines to integrate multimedia objects and program objects

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 42. Document ID: US 5825003 A

Entry 42 of 61

File: USPT

Oct 20, 1998

US-PAT-NO: 5825003

DOCUMENT-IDENTIFIER: US 5825003 A

TITLE: Customer-directed, automated process for transferring funds between accounts using a holding account and local processing

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 43. Document ID: US 5815657 A

Entry 43 of 61

File: USPT

Sep 29, 1998

US-PAT-NO: 5815657

DOCUMENT-IDENTIFIER: US 5815657 A

TITLE: System, method and article of manufacture for network electronic authorization utilizing an authorization instrument

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

☐ 44. Document ID: US 5812668 A

Entry 44 of 61

File: USPT

Sep 22, 1998

US-PAT-NO: 5812668

DOCUMENT-IDENTIFIER: US 5812668 A

TITLE: System, method and article of manufacture for verifying the operation of a remote transaction clearance system utilizing a multichannel, extensible, flexible architecture

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 45. Document ID: US 5805719 A

Entry 45 of 61

File: USPT

Sep 8, 1998

US-PAT-NO: 5805719

DOCUMENT-IDENTIFIER: US 5805719 A

TITLE: Tokenless identification of individuals

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 46. Document ID: US 5799087 A

Entry 46 of 61

File: USPT

Aug 25, 1998

US-PAT-NO: 5799087

DOCUMENT-IDENTIFIER: US 5799087 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 47. Document ID: US 5752239 A

Entry 47 of 61

File: USPT

May 12, 1998

US-PAT-NO: 5752239

DOCUMENT-IDENTIFIER: US 5752239 A

TITLE: Self-service device with an animated user interface to assist the operator to effect a transaction

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 48. Document ID: US 5659165 A

Entry 48 of 61

File: USPT

Aug 19, 1997

US-PAT-NO: 5659165

DOCUMENT-IDENTIFIER: US 5659165 A

TITLE: Customer-directed, automated process for transferring funds between accounts via a communications network

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 49. Document ID: US 5659793 A

Entry 49 of 61

File: USPT

Aug 19, 1997

US-PAT-NO: 5659793

DOCUMENT-IDENTIFIER: US 5659793 A

TITLE: Authoring tools for multimedia application development and network delivery

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 50. Document ID: US 5615257 A

Entry 50 of 61

File: USPT

Mar 25, 1997

US-PAT-NO: 5615257

DOCUMENT-IDENTIFIER: US 5615257 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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l2 and (atm or automated teller machine)	61

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☐ 51. Document ID: US 5613012 A

Entry 51 of 61

File: USPT

Mar 18, 1997

US-PAT-NO: 5613012

DOCUMENT-IDENTIFIER: US 5613012 A

TITLE: Tokenless identification system for authorization of electronic transactions and electronic transmissions

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 52. Document ID: US 5572572 A

Entry 52 of 61

File: USPT

Nov 5, 1996

US-PAT-NO: 5572572

DOCUMENT-IDENTIFIER: US 5572572 A

TITLE: Computer and telephone apparatus with user friendly interface and enhanced integrity features

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 53. Document ID: US 5539530 A

Entry 53 of 61

File: USPT

Jul 23, 1996

US-PAT-NO: 5539530

DOCUMENT-IDENTIFIER: US 5539530 A

TITLE: Facsimile machine with custom operational parameters

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 54. Document ID: US 5485370 A

Entry 54 of 61

File: USPT

Jan 16, 1996

US-PAT-NO: 5485370

DOCUMENT-IDENTIFIER: US 5485370 A

TITLE: Home services delivery system with intelligent terminal emulator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 55. Document ID: US 5455407 A

Entry 55 of 61

File: USPT

Oct 3, 1995

US-PAT-NO: 5455407

DOCUMENT-IDENTIFIER: US 5455407 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 56. Document ID: US 5453601 A

Entry 56 of 61

File: USPT

Sep 26, 1995

US-PAT-NO: 5453601

DOCUMENT-IDENTIFIER: US 5453601 A

TITLE: Electronic-monetary system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 57. Document ID: US 5438433 A

Entry 57 of 61

File: USPT

Aug 1, 1995

US-PAT-NO: 5438433

DOCUMENT-IDENTIFIER: US 5438433 A

TITLE: System and method for facsimile cover page storage and use

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 58. Document ID: US 5434395 A

Entry 58 of 61

File: USPT

Jul 18, 1995

US-PAT-NO: 5434395

DOCUMENT-IDENTIFIER: US 5434395 A

TITLE: Method and device for effecting a transaction between a first and at least one second data carrier and carrier used for this purpose

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 59. Document ID: US 5406628 A

Entry 59 of 61

File: USPT

Apr 11, 1995

US-PAT-NO: 5406628

DOCUMENT-IDENTIFIER: US 5406628 A

TITLE: Public key authentication and key agreement for low-cost terminals

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
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☐ 60. Document ID: US 5299263 A

Entry 60 of 61

File: USPT

Mar 29, 1994

US-PAT-NO: 5299263

DOCUMENT-IDENTIFIER: US 5299263 A

TITLE: Two-way public key authentication and key agreement for low-cost terminals

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☐ 61. Document ID: US 4724521 A

Entry 61 of 61

File: USPT

Feb 9, 1988

US-PAT-NO: 4724521

DOCUMENT-IDENTIFIER: US 4724521 A

TITLE: Method for operating a local terminal to execute a downloaded application program

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image
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Document Number 22

Entry 22 of 72

File: USPT

Oct 5, 1999

US-PAT-NO: 5963648

DOCUMENT-IDENTIFIER: US 5963648 A

TITLE: Electronic-monetary system

DATE-ISSUED: October 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rosen; Sholom S.	New York	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY	N/A	N/A	02

APPL-NO: 8/ 994528

DATE FILED: December 19, 1997

PARENT-CASE:

This application is a divisional of application Ser. No. 08/427,287, filed Apr. 21, 1995, now U.S. Pat. No. 5,799,087 which is a continuation-in-part of U.S. application Ser. No. 08/234,461, filed Apr. 28, 1994 now U.S. Pat. No. 5,557,518.

INT-CL: [6] G07F 19/00

US-CL-ISSUED: 380/24; 235/379, 705/41, 902/2

US-CL-CURRENT: 705/67; 235/379, 705/41, 705/75, 902/2

FIELD-OF-SEARCH: 380/24, 705/35, 705/39, 705/41, 902/2, 902/26

REF-CITED:

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<u>3906460</u>	September 1975	Halpern	N/A
<u>3932730</u>	January 1976	Ambrosio	N/A
<u>3934122</u>	January 1976	Riccitelli	N/A
<u>3937925</u>	February 1976	Boothroyd	N/A
<u>3971916</u>	July 1976	Moreno	N/A
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 CAFIS--Design of Connection Conditions (Bank POS Business Version) Ver. 1, Dec. 1989, NTT Data Communication Co., Ltd. (Japanese language).
 CAFIS--Specification of Customer-Basis Agency Sales Business Service (Bank POS Business Version), Ver. 1, Aug. 1989, NTT Data Communication Co., Ltd. (Japanese language).
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ART-UNIT: 277

PRIMARY-EXAMINER: Barron, Jr.; Gilberto

ATTY-AGENT-FIRM: Morgan & Finnegan, L.L.P.

ABSTRACT:

An electronic-monetary system having (1) banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits and electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction

devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices in off-line transactions; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a clearing bank for balancing the electronic money accounts of the different issuing banks; (6) a data communications network for providing communications services to all components of the system; and (7) a security arrangement for maintaining the integrity of the system, and for detecting counterfeiting and tampering within the system. An embodiment of the invention includes a customer service module which handles lost money claims and links accounts to money modules for providing bank access.

5 Claims, 57 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document			Next Document				
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC

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Document Number 22

Entry 22 of 72

File: USPT

Oct 5, 1999

DOCUMENT-IDENTIFIER: US 5963648 A

TITLE: Electronic-monetary system

BSPR:

Automation has achieved some of these qualities for large transactions through computerized electronic funds transfer ("EFT") systems. Electronic funds transfer is essentially a process of value exchange achieved through the banking system's centralized computer transactions. EFT services are a transfer of payments utilizing electronic "checks," which are used primarily by large commercial organizations.

BSPR:

The Automated Clearing House (ACH) and point of sale (POS) systems are examples of electronic funds transfer systems that have become used by retail and commercial organizations on a substantial basis in recent years. However, the payments made through these types of EFT systems are limited in that they cannot be performed without the banking system. Moreover, ACH transactions usually cannot be performed during off business hours.

BSPR:

Home Banking bill payment services are examples of an electronic funds transfer system used by individuals to make payments. Currently, home banking initiatives have found few customers. Of the banks that have offered services for payments, account transfers and information over the telephone lines using personal computers, less than one percent of the bank's customers are using the service. One reason that Home Banking has not been a successful product is because the customer cannot deposit and withdraw money as needed in this type of system.

BSPR:

Current EFT systems, credit cards, or debit cards, which are used with an on-line system to transfer money between accounts, such as between the account of a merchant and that of a customer, cannot satisfy the need for an automated transaction system that provides for the transfer of universally accepted economic value outside of the banking system. Moreover, credit and debit card systems are generally insecure against fraud and do not provide for adequate privacy.

BSPR:

To implement an automated, yet more convenient transaction system that does not require the banking system to intermediate the transfer, and that can dispense some form of economic value, there has been a trend towards off-line electronic funds transfer. For example, numerous ideas have been proposed for some form of "electronic money" that can be used in cashless payment transaction

as alternatives to the traditional currency and check types of payment systems. See U.S. Pat. No. 4,977,595, entitled "METHOD AND APPARATUS FOR IMPLEMENTING ELECTRONIC CASH," and U.S. Pat. No. 4,305,059, entitled "MODULAR FUNDS TRANSFER SYSTEM."

BSPR:

None of these proposed paperless payment systems are comprehensive enough so as to implement a multipurpose electronic monetary system that includes not only the automated devices that allow subscribers to transfer electronic funds or money between them without any intermediating system, but that also encompasses and includes an entire banking system for generating the value represented by the electronic money and for clearing and settling the electronic money accounts of the banks and financial institutions involved to maintain a monetary balance within the system.

BSPR:

Thus, there is a need for a system that allows common payor to payee economic exchanges without the intermediation of the banking system, and that gives control of the payment process to the individual. Furthermore, a need exists for providing a system of economic exchange that can be used by large organizations for commercial payments of any size, that does not have the limitations of the current EFT systems.

BSPR:

The issuing banks later utilize inter-bank clearing and settling processes to maintain the monetary balance in the banking system, as is currently practiced by today's banking industry.

BSPR:

Also, in accordance with a further aspect of the invention, a process to claim lost money is provided whereby a transaction module owner/holder may submit claims to the banking system via a customer service module, and subsequent to note transfer history reconciliation by the banking system, the owner/holder may recover any lost notes that were claimed.

DEPR:

The present invention provides an improved monetary system using electronic media to securely and reliably exchange economic value. The system can be implemented by integrating novel data processing systems with other procedures which can be implemented with the current worldwide banking systems. In accordance with the present invention, several types of enhancements are presented to the Electronic Monetary System, disclosed in commonly assigned, U.S. patent application Ser. No. 07/794,112, filed Nov. 15, 1991, which is herein incorporated by reference. These enhancements include: a set of security improvements including improved foreign exchange (F/X) and Transfer Notes transaction processes, a process to claim lost money, a process for lining money modules for bank access, a process for a point of sale payment, and a process for updating credit.

DEPR:

Counterfeiting is detected by note reconciliation processes. System-wide time protocols (e.g., note expiration) force electronic notes to be reconciled regularly. Electronic notes are also refreshed (i.e., replaced with a new note with a new expiration date) when banking transactions are performed.

DEPR:

In accordance with the present invention, another secure processing component, a customer service module (CSM) 1192, is preferably employed. A CSM is a tamper-proof device used for creating and updating account profiles. CSMs contain a unique certificate like

those found in money modules and security servers. CSMs can establish secure sessions with other modules (e.g., security servers). The CSM requires a host to interface to a customer service representative and the on-line banking systems.

DEPR:

FIG. 4A shows the functional components of a Customer Service Module (CSM) 1192. The External Interface 3000 interfaces the CSM to other processing and communications means within the Customer Service Module Host (CSMH) processor; the Session Manager 3001 acts to control and commit (i.e., finalize) or abort a transaction session between the CSM and a transaction money module or customer service representative. A Create Account Profile function 3002 constructs from customer account information an account profile that allows a money module to access the subscriber's different bank accounts. A Public Key function certifies and signs a bank account profile. Since the CSM requires a host to interface to a customer service representative and the on-line banking systems, a To Host function 3006 mediates the separation of duties between the CSM applications and the host applications. A Claim Lost Notes function 3008 is responsive to subscriber lost note claims, which the CSM validates and distributes to the issuing banks. The Maintain Security function 3004 manages the list of compromised money modules, applies for certificates, synchronizes the clocks, and manages the creation of new digital keys. Clock/Timer 3012 and Cryptography functions 3010 are identical to those functions in the money modules.

DEPR:

FIG. 9 shows the protocol for a foreign exchange transaction using dollars and pounds as exemplary monetary units. Initially, A agrees to exchange with B dollars (\$) for pounds (.English Pound.) at an exchange rate of \$/.English Pound. (step 1602). A and B then sign on their money modules and the modules prompt their subscribers for the type of transaction (steps 1604-1610). A chooses to buy foreign exchange and B chooses to sell foreign exchange (steps 1612-1614). A and B establish a secure transaction session (steps 1616-1620).

DEPR:

In accordance with the example of a transfer history shown in FIG. 16, FIG. 17 illustrates how the transfer of an electronic representation of currency produces a tree-like structure of electronic representations of currency derived from the initial note produced by a money generator module. As individual transfers (part of a tree branch) of the note are deposited or return to the banking system according to note updating, the note transfer tree in FIG. 17 is built by the Money Issued Reconciliation system. In this example, money generator 1 (module identifiers are contained in digitally signed certificates) produces an electronic representation of currency 2300 having a body group of data fields and a transfer group of data fields, which are shown schematically in part for purposes of clarity of exposition. In addition, the signatures and certificates group of data fields is not shown for convenience.

DEPR:

At 4:10:00, transaction module 6 transfers \$10 to transaction module 5 according to transfer record 2322, and at 5:00:06 transfers the remaining \$10 to transaction module 3 by transfer record 2324. In accordance with an embodiment of the present invention, it is understood that upon deposit of money from a transaction module to a bank, all notes (including credit notes) in the transaction module are sent to the banking system and are updated. Therefore, substantially simultaneous with the above described deposit from transaction module 5 to teller module 2 represented by transfer record 2320, an additional and concurrent transfer represented by transfer record 2326 occurs automatically. Then, a new note having a

value of \$5 (assuming transaction module 3 had no credit notes) will be generated by money module 1 and transferred to transaction module 3 via teller module 2, with the appropriate transfer records appended (not shown). Accordingly, it may be appreciated that updating all notes in a transaction money module upon a transaction (e.g., deposit or withdrawal) between the transaction module and a teller module facilitates the note reconciliation process by providing an additional means for returning notes to the banking system.

DEPR:

At 5:00:10 transaction module 3 deposits \$10 to teller module 2 by transaction record 2328. As described above for the deposit by transaction module 5, concurrent with the deposit by transaction module 3 represented by transaction record 2328, additional and concurrent transfers (not shown) to the banking system of all notes possessed by transaction module 3, including those represented by transfer record 2316 and transfer record 2321, occurs. Then, the banking system returns to transaction module 3 a note having a value equal to the total notes sent to the banking system for updating (e.g., \$15).

DEPR:

Thus, at this point in time, only transaction module 6 possesses transferable vestiges of original note 2300, as represented by transfer notes 2312 and 2314. If transaction module 6 transacts (e.g., deposit or withdrawal) with a teller module before transferring these notes to other transaction money modules, then there will be no transferable notes in circulation that relate to original note 2300; all notes derived from transfers of original note 2300 will have been returned to the banking system, permitting complete construction of the note transfer tree shown in FIG. 17. The date-of-expiration effectively facilitates note reconciliation by limiting the time that a note may be transferred.

DEPR:

FIG. 19 shows the protocol for a subscriber to revalidate the subscriber's money module link to bank accounts. The process begins when the subscriber signs on to his/her money module, and in response to a prompt for a transaction generated by To Subscriber A, the subscriber chooses to revalidate a bank account link for a bank associated with a customer service module (CSM) B (steps 1978-1982). The money module invokes and executes the network sign-on protocol described with reference to FIG. 6, hereinabove, and a secure session is established between money module A and CSMB (step 1986). To Teller A then sends the account profile for the bank accounts to CSMB (steps 1988-1990). Create Account Profile B receives the message, and Maintain Security B validates the CSM certificate and the signature of the account profile (steps 1992-1995). If the certificate or signature is invalid, then the CSM aborts the transaction (step 2000). If the certificate is valid, To Host B sends the list of accounts from the account profile to the CSM host (CSMH), which checks with the on-line banking system to determine whether each account is currently active (steps 1996-2001). If any of the accounts has expired, CSMH signals an abort message to CSM (step 2010), which then aborts the transaction according to the Abort process (step 2000).

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ORPL:

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ORPL:

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ORPL:

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CAFIS--Specification of Customer-Basis Agency Sales Business Service
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Communication Co., Ltd. (Japanese language).

ORPL:
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(corresponding to Smart Cards: The Ultimate Personal Computer).

ORPL:
"Le paiement electronique", P. Remery, J.C. Pailles, and F. Lay,
L'Echo des Recherches, No. 134, 4.degree. trimester 1988--original
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ORPL:
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Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC

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File 351:DERWENT WPI 1963-2000/UD=, UM=, & UP=200022

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File 344:Chinese Patents ABS Apr 1985-2000/Feb

(c) 2000 European Patent Office

File 347:JAPIO Oct 1976-1999/Oct(UPDATED 000208)

(c) 2000 JPO & JAPIO

Set	Items	Description
S1	218	(BANKING OR MONEY()TRANSACTIONS OR BILL? ?(2N)PAY?) (2N) (HO- ME OR REMOTE OR REMOTELY OR PDA OR PERSONAL()DIGITAL()ASSISTA- NT OR TELEPHONE OR PHONE OR SCREEN()PHONE)
S2	2879	(ATM(S)(FINANCIAL OR BANK OR BANKING)) OR AUTOMAT?()TELLER- (MACHINE? ? OR KIOSK? ? OR (REMOTE OR REMOTELY)(2N)FINANCIAL- (SERVICES
S3	3080	(MULTIPLE OR MULTI OR MORE()THAN()ONE OR SECOND OR FOREIGN OR DIFFER? OR VARIOUS OR VARIETY OR BI) (2W) (LANGUAGE? ? OR TO- NGUE? ? OR DIALECT? ? OR LINGUA? ?)
S4	213	EFT OR ELECTRONIC()FUNDS()TRANSFER?
S5	3280	S1 OR S2 OR S4
S6	3	S3 AND S5
S7	28	MC=T01-J05A? AND S3
S8	16	IC=G06F-017/60 AND S3
S9	30	S7 OR S8
S10	11	S9 AND PR=19960418:20000510
S11	11	S9 AND PR=19960420:20000510
S12	19	S9 NOT S11
S13	18	S12 NOT S6

?t6/4/all

6/4/1 (Item 1 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*

AA- 00-180998/200016|

XR- <XRPX> N00-133502|

TI- Speaker independent, continuous speech word spotting voice recognition meta system used in non-voice activated devices|

PA- IMMARCO P (IMMA-I)|

AU- <INVENTORS> IMMARCO P|

NC- 001|

NP- 001|

PN- US 6006185 A 19991221 US 97853959 A 19970509 G10L-005/06 200016 B
|

AN- <LOCAL> US 97853959 A 19970509|

AN- <PR> US 97853959 A 19970509|

LA- US 6006185(14)|

AB- <PN> US 6006185 A|

AB- <NV> NOVELTY - A speech recognition engine compares selected wave segment groups with predetermined list of words and determines which of wave segment groups match the entries in the list of words. The wave segments are preprocessed into wave segment groups and are analyzed for determining which of the wave segment groups most likely represent words that are input into speech recognition engine.|

AB- <BASIC> DETAILED DESCRIPTION - Audio data of phonemes input into audio input unit is detected by phoneme identification unit, individually. The detected phonemes are grouped into wave segments from which groups of wave segments having at least one wave segment is selected and is output to speech recognition engine, by wave segment preprocessor. INDEPENDENT CLAIMS are also included for the following:

(a) method of recognizing continuous speech voice input with computer;

(b) method of using rules based responses in speech recognition system

USE - In non-voice activated device such as car's driver control system, software applications such as word processor and programmable VCRs and televisions. Also in information **kiosk** at store and in portable unit used for the on-the-spot translation of speech into **second language**.

ADVANTAGE - The edges of phonemes in utterance are quickly and accurately isolated, thus identifying the words in the utterance correctly using the speech recognition engine.

DESCRIPTION OF DRAWING(S) - The figure shows flowchart of process done by advanced word spotting voice recognition meta system.

pp; 14 DwgNo 3/7|

DE- <TITLE TERMS> SPEAKER; INDEPENDENT; CONTINUOUS; SPEECH; WORD; SPOT; VOICE; RECOGNISE; META; SYSTEM; NON; VOICE; ACTIVATE; DEVICE|

DC- P86; T01; W04; X22|

IC- <MAIN> G10L-005/06|

IC- <ADDITIONAL> G10L-009/00|

MC- <EPI> T01-C08A; T01-E01C; T01-J18; W04-E04C; W04-V01; X22-L|

FS- EPI; EngPI||

6/4/2 (Item 2 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*

AA- 89-078609/198911|
 XR- <XRPX> N89-060024|
 TI- **Multiple language** telephone answering machine - asks question of caller and determines language of response to determine which language to use|
 PA- HASHIMOTO CORP (HASHM)|
 AU- <INVENTORS> HASHIMOTO K|
 NC- 011|
 NP- 008|
 PN- EP 307137 A 19890315 EP 88308115 A 19880901 198911 B
 PN- JP 1071254 A 19890316 JP 87227729 A 19870911 198917
 PN- US 4866755 A 19890912 198946
 PN- CA 1294080 C 19920107 199209
 PN- EP 307137 B1 19930811 EP 88308115 A 19880901 H04M-001/65 199332
 PN- DE 3883117 G 19930916 DE 3883117 A 19880901 H04M-001/65 199338
 <AN> EP 88308115 A 19880901
 PN- RU 2061997 C1 19960610 SU 4356855 A 19880909 H04M-001/64 199709
 PN- KR 9614222 B1 19961014 KR 8811755 A 19880912 H04M-001/64 199928|
 AN- <LOCAL> EP 88308115 A 19880901; JP 87227729 A 19870911; EP 88308115 A 19880901; DE 3883117 A 19880901; EP 88308115 A 19880901; SU 4356855 A 19880909; KR 8811755 A 19880912|
 AN- <PR> JP 87227729 A 19870911|
 CT- 3.Jnl.Ref; A3...8936; GB 1320970; GB 2188812; JP 58142479; JP 60220652; No-SR.Pub; KP 58142479|
 FD- EP 307137 A
 <DS> (Regional): CH DE FR GB IT LI
 FD- EP 307137 B1
 <DS> (Regional): CH DE FR GB IT LI
 FD- DE 3883117 G Based on EP 307137|
 LA- EP 307137(E<PG> 9); EP 307137(E<PG> 10); RU 2061997(3)|
 DS- <REGIONAL> CH; DE; FR; GB; IT; LI|
 AB- <BASIC> EP 307137 A

A **foreign language** pattern recording section (15) of the machine stores standard response phrases in **various languages** which represent the most likely response to the question "Who is speaking please

" sent out by the machine. A voice recognition section (14) compares the incoming voice with the **foreign language** words stored in the pattern recording section to decide which language the caller is using.

Having decided which is the language a code representing that language is sent to a personal computer (16) which selects an appropriate translation program for loading from the hard disc unit (17) to carry out translations.

USE/ADVANTAGE - Telephone answering machine, **telephone banking** system. World-wide direct dialling is facilitated.

1/4|

AB- <EP> EP 307137 B

A **foreign language** pattern recording section (15) of the machine stores standard response phrases in **various languages** which represent the most likely response to the question "Who is speaking please

" sent out by the machine. A voice recognition section (14) compares the incoming voice with the **foreign language** words stored in the pattern recording section to decide which language the caller is using.

Having decided which is the language a code representing that language is sent to a personal computer (16) which selects an appropriate translation program for loading from the hard disc unit (17) to carry out translations.

USE/ADVANTAGE - Telephone answering machine, **telephone banking** system. World-wide direct dialling is facilitated. (9pp Dwg.No.1/4)|

AB- <US> US 4866755 A

In response to a first outgoing message from a telephone answering device in an original language, such as English, if a calling party from a country speaks in doubt or he cannot answer it quickly, his voice is analysed to determine what language it is in order to send him a second outgoing message in his own language, or else a second outgoing message in the original language is sent out promptly to prevent the calling party from hanging up. The foreign calling party thus can understand the second outgoing message and leave his message on an incoming message tape.

It is possible to use the machine only in a telephone answering device, but also in a general banking system or in question and answer telephone equipment. (8pp)|

DE- <TITLE TERMS> MULTIPLE; LANGUAGE; TELEPHONE; ANSWER; MACHINE; QUESTION; CALL; DETERMINE; LANGUAGE; RESPOND; DETERMINE; LANGUAGE|

DC- T01; W01; W04|

IC- <MAIN> H04M-001/64; H04M-001/65|

MC- <EPI> T01-J05A; T01-J09; W01-C01C; W04-V|

FS- EPI||

6/4/3 (Item 1 from file: 347)

FN- DIALOG(R)File 347:JAPIO|

CZ- (c) 2000 JPO & JAPIO. All rts. reserv.|

TI- **AUTOMATIC TELLER MACHINE**

PN- 02-162487 -JP 2162487 A-

PD- June 22, 1990 (19900622)

AU- OOSE MOTOHITO

PA- NEC ENG LTD [329822] (A Japanese Company or Corporation), JP (Japan)

AN- 63-315103 -JP 88315103-

AD- December 15, 1988 (19881215)

IC- -5- G07D-009/00; G07F-007/08

CL- 29.4 (PRECISION INSTRUMENTS -- Business Machines)

KW- R087 (PRECISION MACHINES -- Automatic Banking)

SO- Section: P, Section No. 1103, Vol. 14, No. 419, Pg. 154, September 10, 1990 (19900910)

AB- **PURPOSE:** To execute an operation guide display by a prescribed **foreign language** by constituting the title machine so that a character code processing part can be switched, when an IC card in which character code data of a **foreign language** is registered is inserted into an IC card reading part.

CONSTITUTION: A translating device 5 receives a display code from a main control part 13 side by a character display control part 6, and it is divided into a character code and a mark code therein. The former and the latter are stored in a character code storage part 9 and a mark storage part 7, respectively, and a mark registering part 8 holds and outputs data corresponding to this stored data. A mark control part 12 generates character display data by synthesizing the data outputted from the mark registering part 8 and data outputted from a parallel-to-series converting part 11, and outputs it to an operation guide display part 4. When an IC card 3 in which code data of a **foreign language** is registered is inserted into an IC card reading part 2, a character code generating part 10 is detached, and instead of said part, the IC card 3 is connected. In such a way, the data can be translated into a prescribed **foreign language** and can be displayed on the operation guide display part.

?

?t13/4/all

13/4/1 (Item 1 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*

AA- 99-493710/199941|

XR- <XRPX> N99-367795|

TI- Electronic coupon storage and retrieval system for discounted travel and scientific information services|

PA- ULTRADATA SYSTEMS INC (ULTR-N)|

AU- <INVENTORS> MISSLER L R; PETERSON M L; ROSS M|

NC- 001|

NP- 001|

PN- US 5943653 A 19990824 US 89410603 A 19890921 G06F-015/50 199941 B

<AN> US 91676818 A 19910328

<AN> US 9319139 A 19930218

<AN> US 96612344 A 19960307|

AN- <LOCAL> US 89410603 A 19890921; US 91676818 A 19910328; US 9319139 A 19930218; US 96612344 A 19960307|

AN- <PR> US 96612344 A 19960307; US 89410603 A 19890921; US 91676818 A 19910328; US 9319139 A 19930218|

FD- US 5943653 A Div ex US 89410603

CIP of US 91676818

CIP of US 9319139

Div ex US 5021961

CIP of US 5229947|

LA- US 5943653(17)|

AB- <PN> US 5943653 A|

AB- <NV> NOVELTY - A data entry circuit receives the data from memories (404,405) and compresses it. A microprocessor (402) selectively retrieves compressed coupon data and service data from memory and expands it into user readable form. The retrieved service and coupon data have coded number which is converted into name of service and a discount available for that service respectively.|

AB- <BASIC> DETAILED DESCRIPTION - A book of coupons represents a discounted services. A memory stores compressed service data and coupon data. The service data represents selected service in desired category, near a location. The coupon data represents the discount available for selected services and has identifying numbers of coupons in a coupon book corresponding to the available discounts. The memory (404) stores the names and locations of restaurants, motels, service stations and other services. The coupon data memory (405) stores data identifying the service which offer a discount, the amount and valid period of discount. A display (410) displays expanded service data and coupon data.

USE - In travel information, scientific information, manufacturing processes, service parts information, repair procedures, literature, geography, history, cultures, **foreign language** etc.

ADVANTAGE - Hand held device which stores and retrieves large volume of data quickly without using separate memory modules is obtained.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of electronic coupon storage and retrieval system.

Microprocessor (402)

Memories (404,405)

Display (410)

pp; 17 DwgNo 4/4|

DE- <TITLE TERMS> ELECTRONIC; COUPON; STORAGE; RETRIEVAL; SYSTEM; DISCOUNT; TRAVEL; SCIENCE; INFORMATION; SERVICE|

DC- T01|

IC- <MAIN> G06F-015/50|
 IC- <ADDITIONAL> G06F-003/02; G06F-013/00|
 MC- <EPI> T01-J05A ; T01-J05B3|
 FS- EPI||

13/4/2 (Item 2 from file: 351)
 DIALOG(R)File 351:DERWENT WPI
 (c) 2000 Derwent Info Ltd. All rts. reserv.

IM- *Image available*
 AA- 97-479790/199744|
 XR- <XRPX> N97-400246|
 TI- Compiled information selective access system for career information -
 has information stored on database and allows use of different levels
 of inquiry with user selecting various careers and asking specific
 questions|
 PA- FATSEAS A E (FATS-I); FATSEAS T (FATS-I); GEORGE J E (GEOR-I); KREKLOW
 P (KREK-I)|
 AU- <INVENTORS> FATSEAS A E; FATSEAS T; GEORGE J E; KREKLOW P|
 NC- 001|
 NP- 001|
 PN- US 5671409 A 19970923 US 95388365 A 19950214 G06F-013/42 199744 B
 |
 AN- <LOCAL> US 95388365 A 19950214|
 AN- <PR> US 95388365 A 19950214|
 LA- US 5671409(12)|
 AB- <BASIC> US 5671409 A

The system includes a device which initiates access of information related to career and occupational opportunities stored in ROM. The device initiates the access operation to provide a selectable first level of inquiry file comprising multiple sub-files. Each sub-file relates to a specific career or occupation and sub-files are opened in response to a selection made at the first level of inquiry. Sequentially accessible fields of information are synchronously generated from the selected sub-file. The fields of information comprise a first field containing a randomly selectable number of predetermined questions.

Question selection is performed to elicit a response which is specific to the career or occupation in the sub-file and to provide specific information. A second field contains corresponding responses to the questions. At least one of the

questions from the first field is selected. Responses corresponding specifically to the selected questions are accessed from the second field to provide specific information regarding the selected career or occupation. The sub-file is then closed.

ADVANTAGE - Can be provided in different computer-accessible formats e.g. CD-ROM. **Variety** of **languages** can be used. Tailored to unique inquiries and needs of individual user.

Dwg.3c/3|

DE- <TITLE TERMS> COMPILE; INFORMATION; SELECT; ACCESS; SYSTEM; INFORMATION
 ; INFORMATION; STORAGE; DATABASE; ALLOW; LEVEL; ENQUIRY; USER; SELECT;
 VARIOUS; SPECIFIC; QUESTION|
 DC- T01|
 IC- <MAIN> G06F-013/42|
 MC- <EPI> T01-J05A |
 FS- EPI||

13/4/3 (Item 3 from file: 351)
 DIALOG(R)File 351:DERWENT WPI
 (c) 2000 Derwent Info Ltd. All rts. reserv.

IM- *Image available*
 AA- 97-476932/199744|
 XR- <XRPX> N97-397716|
 TI- Image production apparatus for determining ideal companion based on
 character judgement - has image display unit that displays and/or
 prints image synthesised by image synthesis unit|
 PA- TAKADA KOGYOSHO KK (TAKA-N)|
 NC- 001|
 NP- 001|
 PN- JP 9223176 A 19970826 JP 9653916 A 19960216 G06F-017/60 199744 B
 |
 AN- <LOCAL> JP 9653916 A 19960216|
 AN- <PR> JP 9653916 A 19960216|
 LA- JP 9223176(12)|
 AB- <BASIC> JP 9223176 A

The apparatus has an input unit (13) which inputs the replies to a series of questions designed to evaluate the character of a person. A body component evaluation unit (14) estimates the type of each body component that corresponds with the input replies.

An image synthesis unit (15) synthesises the body components estimated by the evaluation unit on a screen to form the image of an ideal companion. An image display unit (16) displays and/or prints the synthesised image.

ADVANTAGE - Exactly expresses image of ideal companion visually rather than in ideological words. Can be used in games since degree of unpredictability is high. Can be used by persons of **different** ages and **languages** since ideal companion is expressed in image.

Dwg.1/10|

DE- <TITLE TERMS> IMAGE; PRODUCE; APPARATUS; DETERMINE; IDEAL; COMPANION;
 BASED; CHARACTER; JUDGEMENT; IMAGE; DISPLAY; UNIT; DISPLAY; PRINT;
 IMAGE; SYNTHESIS; IMAGE; SYNTHESIS; UNIT|
 DC- P36; T01|
 IC- <MAIN> G06F-017/60 |
 IC- <ADDITIONAL> A63F-009/06; G06T-011/80|
 MC- <EPI> T01-J10C; T01-P02|
 FS- EPI; EngPI|

13/4/4 (Item 4 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*
 AA- 97-402142/199737|
 XR- <XRPX> N97-334528|
 TI- Electronics dictionary provided with learning function - stores history
 of result of retrieval including first language information retrieved
 by retrieving device in response to each instruction by instruction
 device|
 PA- CANON KK (CANO)|
 AU- <INVENTORS> FUSHIMOTO H|
 NC- 001|
 NP- 001|
 PN- US 5655128 A 19970805 US 9319877 A 19930219 199737 B
 <AN> US 95383695 A 19950201|
 AN- <LOCAL> US 9319877 A 19930219; US 95383695 A 19950201|
 AN- <PR> JP 9270203 A 19920220|
 FD- US 5655128 A Cont of US 9319877|
 LA- US 5655128(24)|
 AB- <BASIC> US 5655128 A
 the dictionary includes a dictionary memory for storing a

dictionary comprising first and a **second** group of **language** information corresponding to the first group of language information. An input device inputs first language information. An instruction device instructs the apparatus to retrieve the first language information. A retrieving device searches the first group of language information stored in the dictionary memory for the first language information and retrieves the first language information in response to the instruction from the instruction device. The retrieving device retrieves **second language** information corresponding to the first language information from the **second** group of **language** information stored in the dictionary memory. An history memory stores the history of the result of the retrieval including the first language information retrieved by the retrieving device in response to each instruction by the instruction device. A selecting device selects at least one of the first language information displayed by the display device.

ADVANTAGE - Allows storage of language information necessary for operator without any reduction in efficiency of retrieval operations.

Dwg.1/15|

DE- <TITLE TERMS> ELECTRONIC; DICTIONARY; LEARNING; FUNCTION; STORAGE; HISTORY; RESULT; RETRIEVAL; FIRST; LANGUAGE; INFORMATION; RETRIEVAL; RETRIEVAL; DEVICE; RESPOND; INSTRUCTION; INSTRUCTION; DEVICE|

DC- T01|

IC- <MAIN> G06F-017/28|

MC- <EPI> T01-J01; T01-J05A1 |

FS- EPI||

13/4/5 (Item 5 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*

AA- 97-385530/199735|

XR- <XRPX> N97-320911|

TI- **Multi -lingual** financial transaction processing method for travelling bank customers - in which voice response is provided in **multiple languages** to identify customer s language and establish country of customer's bank, and provide services and translate requests for local staff|

PA- CITIBANK NA (CITI-N)|

AU- <INVENTORS> JENNINGS H W; PADALINO R; PERALTA R; PINNELL N; SHINN P C; PINNELL N R|

NC- 076|

NP- 008|

PN- WO 9726614 A1 19970724 WO 96US19753 A 19961220 G06F-157/00 199735 B

PN- AU 9714157 A 19970811 AU 9714157 A 19961220 G06F-157/00 199747

PN- ZA 9609683 A 19980729 ZA 969683 A 19961119 G06F-000/00 199835

PN- US 5794218 A 19980811 US 96586242 A 19960116 G06F-017/60 199839

PN- EP 875034 A1 19981104 EP 96944319 A 19961220 G06F-017/28 199848

<AN> WO 96US19753 A 19961220

PN- BR 9612443 A 19990713 BR 9612443 A 19961220 G06F-157/00 199939

<AN> WO 96US19753 A 19961220

PN- CN 1222241 A 19990707 CN 96180159 A 19961220 G06F-017/00 199945

PN- AU 710000 B 19990909 AU 9714157 A 19961220 G06F-017/28 199949|

AN- <LOCAL> WO 96US19753 A 19961220; AU 9714157 A 19961220; ZA 969683 A 19961119; US 96586242 A 19960116; EP 96944319 A 19961220; WO 96US19753 A 19961220; BR 9612443 A 19961220; WO 96US19753 A 19961220; CN 96180159 A 19961220; AU 9714157 A 19961220|

AN- <PR> US 96586242 A 19960116|

CT- Jnl.Ref; US 5136633; US 5440615|

FD- WO 9726614 A1

<DS> (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
 MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN
 <DS> (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW
 NL OA PT SD SE SZ UG

FD- AU 9714157 A Based on WO 9726614

FD- EP 875034 A1 Based on WO 9726614

<DS> (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC
 NL PT RO SE SI

FD- BR 9612443 A Based on WO 9726614

FD- AU 710000 B Previous Publ. AU 9714157

Based on WO 9726614|

LA- WO 9726614(E<PG> 82); ZA 9609683(83); EP 875034(E)|

DS- <NATIONAL> AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI
 GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
 NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN|

DS- <REGIONAL> AT; BE; CH; DE; DK; EA; ES; FI; FR; GB; GR; IE; IT; KE; LS;
 LU; MC; MW; NL; OA; PT; SD; SE; SZ; UG; AL; LI; LT; LV; RO; SI|

AB- <BASIC> WO 9726614 A

The **multi -lingual** financial transaction processing method involves using an interactive voice response computer system which can be called and used by any location using appropriate access codes. The customer (16) of the financial institution is prompted in **various languages** until the customer s language and home country are identified.

The customer (16) is then connected by telephone with a representative (22) who speaks the customer s language and who can authorise the transaction by accessing the customer s records. Authorisation by the local representative (12) and record keeping are also provided.

USE/ADVANTAGE - Allowing telephone-based interactive performance of financial transactions in **multiple languages** .

Assists translation between local branch representative, customer and customer's home bank customer service representative. Enables branch representative to effect single financial transaction through single telephone call.

Dwg.1/35|

DE- <TITLE TERMS> MULTI; LINGUAL; FINANCIAL; TRANSACTION; PROCESS; METHOD;
 TRAVEL; BANK; CUSTOMER; VOICE; RESPOND; MULTIPLE; LANGUAGE; IDENTIFY;
 CUSTOMER; LANGUAGE; ESTABLISH; COUNTRY; CUSTOMER; BANK; SERVICE;
 TRANSLATION; REQUEST; LOCAL; STAFF|

DC- T01|

IC- <MAIN> G06F-000/00; G06F-017/00; G06F-017/28; **G06F-017/60** ;
 G06F-157/00|

IC- <ADDITIONAL> G06F-157-00|

MC- <EPI> **T01-J05A1** |

FS- EPI||

13/4/6 (Item 6 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*

AA- 97-350627/199732|

XR- <XRPX> N97-290692|

TI- Product selection and ordering system for on-line purchasing - in which buyer interface allows buyer to specify multiple- product order from buyer-chosen supplier, and transmit order to buyer-chosen supplier|

PA- DE LA MOTTE A L (DMOT-I)|

AU- <INVENTORS> DE LA MOTTE A L|

NC- 064|

NP- 002|

PN- WO 9717663 A1 19970515 WO 96US18133 A 19961108 199732 B
 PN- AU 9677283 A 19970529 AU 9677283 A 19961108 199737|
 AN- <LOCAL> WO 96US18133 A 19961108; AU 9677283 A 19961108|
 AN- <PR> US 956604 A 19951109|
 CT- 6.Jnl.Ref; US 4799156; US 4992940; US 5175684; US 5319542; US 5361199|
 FD- WO 9717663 A1

<DS> (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE
 HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU
 SD SE SG SI SK TJ TM TT UA UG UZ VN

<DS> (Regional): AT BE CH DE DK ES FI FR GB GR IE IT KE LS LU MC MW NL
 OA PT SD SE SZ UG

FD- AU 9677283 A Based on WO 9717663|

LA- WO 9717663(E<PG> 78)|

DS- <NATIONAL> AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS
 JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE
 SG SI SK TJ TM TT UA UG UZ VN|

DS- <REGIONAL> AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; KE; LS; LU;
 MC; MW; NL; OA; PT; SD; SE; SZ; UG|

AB- <BASIC> WO 9717663 A

The product selection and ordering system includes a computer system located near to a buyer, a trade-facilitating hub and one or more vendors. The buyer enters business and trade information and also enters information regarding the various products available from the vendors, that the buyer desires to purchase (200). After buyer-information and product-selection information have been entered in the purchase-facilitating program, the information is combined into a composite document which is sent (228) to the trade facilitating hub.

At the hub, the composite document is conveyed into multiple documents which are sent to each corresponding vendor. The hub then forwards responses from the vendors to the buyer. If the buyer, and vendors use **different languages**, then the preferred system translates all correspondence into the appropriate language for the receiving party prior to sending.

USE/ADVANTAGE - Facilitating selection, ordering and purchasing of products using user interface such that user interface and product database are language-variable.

Allows buyer to select desired products from directory of products offered by suppliers, and to transmit order for selected products from corresponding supplier.

Dwg.39/39|

DE- <TITLE TERMS> PRODUCT; SELECT; ORDER; SYSTEM; LINE; PURCHASE; BUY;
 INTERFACE; ALLOW; BUY; SPECIFIED; MULTIPLE; PRODUCT; ORDER; BUY; CHOICE
 ; SUPPLY; TRANSMIT; ORDER; BUY; CHOICE; SUPPLY|

DC- T01|

IC- <MAIN> G06F-017/60 |

IC- <ADDITIONAL> G06F-015/00|

MC- <EPI> T01-J05A1 ; T01-J08C|

FS- EPI||

13/4/7 (Item 7 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*

AA- 97-329954/199730|

XR- <XRPX> N97-273725|

TI- High-speed common processing system of intermediate language text - has intermediate language text common processor which provides chain between similar kind of intermediate language text stored in memory based on command list and head pointer|

PA- NEC CORP (NIDE)|

NC- 001|
NP- 001|
PN- JP 9134290 A 19970520 JP 95291345 A 19951109 G06F-009/45 199730 B
|
AN- <LOCAL> JP 95291345 A 19951109|
AN- <PR> JP 95291345 A 19951109|
LA- JP 9134290(5)|
AB- <BASIC> JP 9134290 A
The system includes a memory (3) which stores **various**
intermediate **language** text. A similar text managed table (2) has a
head pointer which points out a head address of a command list which
stores a code value of the text.
An intermediate language text common processor (1) provides a chain
between the same kind of intermediate language text in the memory
according to the command list and head pointer.
ADVANTAGE - Enables high-speed searching of similar kind of
intermediate language text.
Dwg.1/2|
DE- <TITLE TERMS> HIGH; SPEED; COMMON; PROCESS; SYSTEM; INTERMEDIATE;
LANGUAGE; TEXT; INTERMEDIATE; LANGUAGE; TEXT; COMMON; PROCESSOR; CHAIN;
SIMILAR; KIND; INTERMEDIATE; LANGUAGE; TEXT; STORAGE; MEMORY; BASED;
COMMAND; LIST; HEAD; POINT|
DC- T01|
IC- <MAIN> G06F-009/45|
IC- <ADDITIONAL> G06F-009/32|
MC- <EPI> T01-F03A; **T01-J05A** |
FS- EPI||

13/4/8 (Item 8 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*
AA- 97-289455/199726|
XR- <XRPX> N97-239673|
TI- Reservation system interfacing apparatus for e.g travel tickets - uses
application program interfaces resident on server to interact with
client computers, such that single client can be written to communicate
with each computer reservation system|
PA- ELECTRONIC DATA SYSTEMS CORP (ELDA-N)|
AU- <INVENTORS> FLAKE W L; HUNT D J; SMITH G A|
NC- 023|
NP- 005|
PN- WO 9718522 A1 19970522 WO 96US18697 A 19961113 G06F-017/60 199726 B
PN- AU 9710801 A 19970605 AU 9710801 A 19961113 G06F-017/60 199738
PN- US 5781892 A 19980714 US 95557508 A 19951113 G06F-017/30 199835
PN- EP 861473 A1 19980902 EP 96940839 A 19961113 G06F-017/60 199839
<AN> WO 96US18697 A 19961113
PN- AU 710188 B 19990916 AU 9710801 A 19961113 G06F-017/60 199950|
AN- <LOCAL> WO 96US18697 A 19961113; AU 9710801 A 19961113; US 95557508 A
19951113; EP 96940839 A 19961113; WO 96US18697 A 19961113; AU 9710801 A
19961113|
AN- <PR> US 95557508 A 19951113|
CT- Jnl.Ref; GB 1565286; US 4862357; WO 9310502|
FD- WO 9718522 A1
<DS> (National): AU CA JP NO
<DS> (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
FD- AU 9710801 A Based on WO 9718522
FD- EP 861473 A1 Based on WO 9718522
<DS> (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
FD- AU 710188 B Previous Publ. AU 9710801

Based on

WO 9718522|

LA- WO 9718522(E<PG> 30); EP 861473(E)|
 DS- <NATIONAL> AU CA JP NO|
 DS- <REGIONAL> AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL;
 PT; SE; LI|
 AB- <BASIC> WO 9718522 A

The apparatus for interfacing with a computer reservation system includes a client computer (12) which generates commands in response to user input. A server computer (14) receives the commands and generates requests to a computer reservation system through application program interfaces responsive to the commands.

After receiving sets of reservation data from the computer reservation system in response to the requests, the received data is normalised and selected portions of the data are returned to the client computer.

USE - Interfacing with computer reservation system for booking e.g. airline tickets, hotel reservations, rental car agencies, bus lines, railways etc., and concert, museum and theatre tickets etc.

ADVANTAGE - Travel agent need learn to use single, user-friendly application program, rather than **different** code languages for multiple reservation systems.

Dwg.1/5|

DE- <TITLE TERMS> RESERVE; SYSTEM; INTERFACE; APPARATUS; TRAVEL; TICKET;
 APPLY; PROGRAM; INTERFACE; RESIDENCE; SERVE; INTERACT; CLIENT; COMPUTER
 ; SINGLE; CLIENT; CAN; WRITING; COMMUNICATE; COMPUTER; RESERVE; SYSTEM|
 DC- T01|
 IC- <MAIN> G06F-017/30; G06F-017/60 |
 MC- <EPI> T01-J05A2 |
 FS- EPI||

13/4/9 (Item 9 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*

AA- 97-080407/199708|

XR- <XRPX> N97-066579|

TI- Management system of reservation data in library - has reservation information and storage place information erasure unit erases reservation information and storage place information, when loan processing is performed by loan data entry unit|

PA- HITACHI LTD (HITA)|

NC- 001|

NP- 001|

PN- JP 8315019 A 19961129 JP 95116841 A 19950516 G06F-017/60 199708 B
 |

AN- <LOCAL> JP 95116841 A 19950516|

AN- <PR> JP 95116841 A 19950516|

LA- JP 8315019(8)|

AB- <BASIC> JP 8315019 A

The system performs reservation processing of data in a library. When a loan is impossible, a reservation data number is input by a reservation user number input unit (105). The reservation document book information is used and a writing book information file (100) and a user information file (101) are referred. Matching of the writing book information and the user correspond to the reservation data, is performed. The result is stored in a reservation information file (102). The reservation data are returned. A return data entry unit (110) and a reservation data fixing unit (108) decide a storage place of the reservation data with reference to the storage situation of the reservation data.

The storage place of the title of the reservation data is stored in a storage place information memory (107). At the time of loan to a reservation user, the title of the reservation data is referred from the storage place information memory. A loan data entry unit (113) performs loan processing. A reservation information and storage place information erasure unit (112) erases the reservation information and storage place information, during loan processing. The loan information is established in a data information file (106).

ADVANTAGE - Enables correct grasping of storage place of reservation user and reservation data. Provides reservation data to user, reliably and quickly. Performs exact matching even when reservation data is **foreign language** data.

Dwg.1/5|

DE- <TITLE TERMS> MANAGEMENT; SYSTEM; RESERVE; DATA; LIBRARY; RESERVE;
INFORMATION; STORAGE; PLACE; INFORMATION; ERASE; UNIT; ERASE; RESERVE;
INFORMATION; STORAGE; PLACE; INFORMATION; LOAN; PROCESS; PERFORMANCE;
LOAN; DATA; ENTER; UNIT|
DC- T01|
IC- <MAIN> G06F-017/60 |
IC- <ADDITIONAL> G06F-017/30|
MC- <EPI> T01-J05A2 ; T01-J05B9|
FS- EPI||

13/4/10 (Item 10 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*

AA- 96-398879/199640|

XR- <XRPX> N96-336160|

TI- Point of sale appts. for customer service of foreign correspondence -
has main controller which supplies data to translator which converts
first language to **second language** and then displays it on liq.
crystal display when touch panel is operated|

PA- NEC KOFU LTD (NIDE)|

NC- 001|

NP- 001|

PN- JP 8194873 A 19960730 JP 957089 A 19950120 G07G-001/01 199640 B
|

AN- <LOCAL> JP 957089 A 19950120|

AN- <PR> JP 957089 A 19950120|

LA- JP 8194873(7)|

AB- <BASIC> JP 8194873 A

The appts. has a first memory (2) which stores each language data of several languages. A translation demand card (10) specifies a **second language** which shows a translation demand of the liquidation items from a first language to the **second language** by using a bar code. A code scanner (9b) reads the bar code given by the translation demand card. A second and third memory (2,3) respectively stores the first and **second language**. A master file (12) stores a goods data corresp. to the first language with the bar code.

A translator (5) converts the first language to the **second language** according to the character string supplied at the first language. A touch panel (6b) is operated by switching the first and **second language** character string inputs. A printer (11) and a liquid crystal display (7b) respectively prints and displays the input and output data of the **second language**. The goods data of the first language corresp. to bar code is searched to the master file. A main controller (1) supplies the data i.e. translated by the translator and then displayed it on LCD when the touch panel is operated.

ADVANTAGE - Attains simple conversion using display and translator.

Dwg.1/5|

DE- <TITLE TERMS> POINT; SALE; APPARATUS; CUSTOMER; SERVICE; FOREIGN;
 CORRESPOND; MAIN; CONTROL; SUPPLY; DATA; TRANSLATION; CONVERT; FIRST;
 LANGUAGE; SECOND; LANGUAGE; DISPLAY; LIQUID; CRYSTAL; DISPLAY; TOUCH;
 PANEL; OPERATE|
 DC- T01; T05|
 IC- <MAIN> G07G-001/01|
 IC- <ADDITIONAL> G06F-017/28|
 MC- <EPI> T01-J05A ; T05-L01C; T05-L01D|
 FS- EPI||

13/4/11 (Item 11 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*

AA- 96-197902/199620|

XR- <XRPX> N96-166163|

TI- Learning aid appts. for student studying foreign language ,
 mathematics, science, history - has output unit for producing
 acquisition situation of reply for certain question stored in recorded
 information memory based on result of CPU|

PA- OSK KK (OSKO-N)|

NC- 001|

NP- 001|

PN- JP 8069244 A 19960312 JP 94203462 A 19940829 G09B-005/02 199620 B
 |

AN- <LOCAL> JP 94203462 A 19940829|

AN- <PR> JP 94203462 A 19940829|

LA- JP 8069244(5)|

AB- <BASIC> JP 8069244 A

The appts. has a recorded information memory (2) in which
 informations such as questions and answers that are used for learning
 comprehension, are stored beforehand. It also has an input unit (3) in
 which a user can input a selected question condition mode arbitrarily,
 based on the informations that are stored in the memory.

A CPU (1) calculates an acquisition situation to a given question
 according to the situation of the correct answer to the question. An
 output unit (4) produces the acquisition situation of a reply to a
 certain question based on the result of the CPU.

USE/ADVANTAGE - Suitable for schools and universities. Improves
 learning efficiency rate of student.

Dwg.1/7|

DE- <TITLE TERMS> LEARNING; AID; APPARATUS; STUDENT; STUDY; FOREIGN;
 LANGUAGE; MATHEMATICAL; SCIENCE; HISTORY; OUTPUT; UNIT; PRODUCE;
 ACQUIRE; SITUATE; REPLY; QUESTION; STORAGE; RECORD; INFORMATION; MEMORY
 ; BASED; RESULT; CPU|

DC- P85; T01; W04|

IC- <MAIN> G09B-005/02|

IC- <ADDITIONAL> G06F-015/18|

MC- <EPI> T01-J05A ; T01-P01; W04-W01; W04-W05|

FS- EPI; EngPI||

13/4/12 (Item 12 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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IM- *Image available*

AA- 95-143295/199519|

XR- <XRPX> N95-112949|

TI- Telephone call tariff information service system - incorporates maintenance processor with software which controls voice processing terminal in tariff information transmitter based on language option exercised by subscriber|
 PA- NIPPON DENKI TSUSHIN SYSTEM KK (NIDE)|
 NC- 001|
 NP- 001|
 PN- JP 7066908 A 19950310 JP 93213277 A 19930830 H04M-015/00 199519 B
 |
 AN- <LOCAL> JP 93213277 A 19930830|
 AN- <PR> JP 93213277 A 19930830|
 LA- JP 7066908(3)|
 AB- <BASIC> JP 7066908 A

The system consists of a telephone call tariff information transmitter (4), a subscriber terminal (1) in a time division network (2) with trunk (3), a maintenance processor (7) and a transmission control device (8). The speech path controller (6) switches the connection through time division network. The telephone tariff information transmitter is controlled by online software resident in maintenance processor. The speech path controller and maintenance processor are linked on a common bus (5).

The subscriber selects a language of his choice using a language identification code. The online software inputs a command to the voice processing control terminal (42) through transmission control device. The processor software edits the voice message containing the tariff information in the desired language. The voice processing device controlled by the voice processing control terminal transmits the tariff information through the trunk.

ADVANTAGE - Provides service in two **different foreign languages** apart from local language.

Dwg.1/1|

DE- <TITLE TERMS> TELEPHONE; CALL; TARIFF; INFORMATION; SERVICE; SYSTEM; INCORPORATE; MAINTAIN; PROCESSOR; SOFTWARE; CONTROL; VOICE; PROCESS; TERMINAL; TARIFF; INFORMATION; TRANSMIT; BASED; LANGUAGE; OPTION; EXERCISE; SUBSCRIBER|
 DC- T01; W01|
 IC- <MAIN> H04M-015/00|
 MC- <EPI> **T01-J05A1** ; W01-C03; W01-C06|
 FS- EPI||

13/4/13 (Item 13 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*

AA- 94-121612/199415|

XR- <XRPX> N98-455171|

TI- Electronic news translating and delivery system - has user manager for managing registration and cancellation of several news groups and identifying news requiring translation based on subscription request of registered user|

PA- FUJITSU LTD (FUIT)|

AU- <INVENTORS> NISHINO F; SUGIMOTO N|

NC- 002|

NP- 002|

PN- JP 6068144 A 19940311 JP 92216938 A 19920814 G06F-015/38 199415 B

PN- US 5828990 A 19981027 US 9391015 A 19930714 G06F-017/28 199850

<AN> US 95367774 A 19950103

<AN> US 96624956 A 19960325|

AN- <LOCAL> JP 92216938 A 19920814; US 9391015 A 19930714; US 95367774 A 19950103; US 96624956 A 19960325|

AN- <PR> JP 92216938 A 19920814|
 FD- US 5828990 A Cont of US 9391015
 Cont of US 95367774|
 LA- JP 6068144(13); US 5828990(15)|
 AB- <BASIC> JP 6068144 A
 Dwg.1/7
 US 5828990 A

The system includes a job manager that manages the starting time of translating and delivery jobs. A news sever classifies articles contained in the electronic news (5) received via first network, into multiple news groups and stores them based on the classifications. A translator (17) translates the stored articles into a preselected form. A translation manager (15) initiated by the job manager receives the transferred articles in news groups of the multiple news groups, which require translation. A user manager (20) manages registration and cancellation of several users and that of several news groups to which the user (1) subscribes.

A news group requiring translation is identified by the user manager, when a registered user requests a subscription to a previously unsubscribed news group and deletes a news group (22) to which no registered user subscribes and cancels translations. The user manager also creates a directory corresponding to each news group and creates destination list file for each news group, when a user is the first subscriber to the news group. A delivery manager (23) initiated by the job manager, delivers the articles in the news groups translated by translator and subscribed to the users, to the appropriate user via a second network.

USE - For translating articles written in **foreign language**.

ADVANTAGE - Reduces load of translation system. Translates articles of electronic news received via one network into **various languages** at one time and providing them readily to subscriber in suitable form, via another network.

Dwg.1/6|

DE- <TITLE TERMS> ELECTRONIC; NEWS; TRANSLATION; DELIVER; SYSTEM; USER;
 MANAGE; MANAGE; REGISTER; CANCEL; NEWS; GROUP; IDENTIFY; NEWS; REQUIRE;
 TRANSLATION; BASED; SUBSCRIBER; REQUEST; REGISTER; USER|
 DC- T01|
 IC- <MAIN> G06F-015/38; G06F-017/28|
 IC- <ADDITIONAL> H04M-003/42|
 MC- <EPI> T01-J05A ; T01-J11D; T01-J16C3|
 FS- EPI||

13/4/14 (Item 14 from file: 351)

DIALOG(R)File 351:DERWENT WPI
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IM- *Image available*

AA- 91-281853/199139|

XR- <XRPX> N91-215490|

TI- Electronic postal shipping scale with multilingual operator - displays operator prompt messages and generates reports in **more than one language** which is selectable by operator via microprocessor|

PA- PITNEY BOWES INC (PITB)|

AU- <INVENTORS> HOWARD J B; JACKSON L; KOTECKI J D; KRAMER W L; MOORE W D;
 RAIKES T E|

NC- 002|

NP- 002|

PN- CA 2011978 A 19910716 CA 2011978 A 19900716 199139 B

PN- US 5009276 A 19910423 US 90466120 A 19900116 199144|

AN- <LOCAL> CA 2011978 A 19900716; US 90466120 A 19900116|

AN- <PR> US 90466120 A 19900116|

AB- <BASIC> CA 2011978 A

The postal scale comprises weight sensor for generating a weight signal, appts. for generating a language select signal, and a display for displaying operator prompt messages. The scale also comprises a memory that stores at least two sets of operator prompt message texts, each set being in a **different language**. The scale further comprises a microprocessor that receives the weight and language select signals, selects one set of operator prompt message texts in accordance with the language select signal, and causes prompt messages from the selected set to be displayed on the display.

Alternatively, the scale system comprises a printer in addition to or instead of a display. The memory stores at least two sets of report heading texts, each set in a **different language**, in addition to or instead of the sets of operator prompt message texts.

ADVANTAGE - Is interfaced to report printer. (32pp Dwg.No.1/7)

AB- <US> US 5009276 A

The postal scale comprises a weight sensing device for generating a weight signal. An input device generates a language select signal. An output device outputs texts. A memory stores texts. The texts comprises a number of sets of texts. Each of the sets is in a **different language**. A microprocessor is programmed to receive and process the weight signal, receive the language select signal, select one of the sets of texts in accordance with the language select signal, and cause the output device to output texts from the selected set. The texts are stored in the memory in the form of character strings. Each of the character strings comprises at least two substrings. Each of the substrings ends in a termination character.

ADVANTAGE - Suitable for poly-lingual groups of users. (13pp)

DE- <TITLE TERMS> ELECTRONIC; POSTAL; SHIPPING; SCALE; OPERATE; DISPLAY; OPERATE; PROMPT; MESSAGE; GENERATE; REPORT; MORE; ONE; LANGUAGE; SELECT ; OPERATE; MICROPROCESSOR|

DC- S02; T01; T05|

IC- <ADDITIONAL> G01G-019/40; G06F-015/21|

MC- <EPI> S02-D03; T01-J05A ; T05-C|

FS- EPI||

13/4/15 (Item 15 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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IM- *Image available*

AA- 90-203086/199027|

XR- <XRPX> N90-158041|

TI- Automatic document-collating and envelope-stuffing machine - has modular electronic control system with each module storing error messages in **different languages** for selection by user|

PA- PITNEY BOWES INC (PITB)|

AU- <INVENTORS> FRANCISCO R|

NC- 010|

NP- 008|

PN- EP 376741 A 19900704 EP 89313676 A 19891228 199027 B

PN- AU 8947354 A 19900705 199035

PN- CA 2006023 A 19900630 199037

PN- JP 3032898 A 19910213 199113

PN- US 5146587 A 19920908 US 88292060 A 19881230 G06F-011/32 199239

PN- EP 376741 A3 19930714 EP 89313676 A 19891228 199406

PN- EP 376741 B1 19951018 EP 89313676 A 19891228 G05B-019/04 199546

PN- DE 68924585 E 19951123 DE 624585 A 19891228 G05B-019/04 199601

<AN> EP 89313676 A 19891228|

AN- <LOCAL> EP 89313676 A 19891228; US 88292060 A 19881230; EP 89313676 A

19891228; EP 89313676 A 19891228; DE 624585 A 19891228; EP 89313676 A

19891228|

AN- <PR> US 88292060 A 19881230|

CT- NoSR.Pub; EP 295379; GB 2048203; GB 2079004; GB 2128367; EP 180400; EP 187677; EP 228182|

FD- EP 376741 A

<DS> (Regional): CH DE FR GB LI NL

FD- EP 376741 B1

<DS> (Regional): CH DE FR GB LI NL

FD- DE 68924585 E Based on

EP 376741|

LA- US 5146587(28); EP 376741(E<PG> 33)|

DS- <REGIONAL> CH; DE; FR; GB; LI; NL|

AB- <BASIC> EP 376741 A

Each individual module of the electronics control system of the automatic document-collating and envelope-stuffing machine has pre-stored error messages in the respective module. An EPROM in each module stores error messages such as paper jam, out of paper and other messages relating to feeding multiple documents at respective feed stations, translated into as many **different languages** as required for trading purposes. A translation sub-routine forms part of the start-up operation and provides for selection of the appropriate message.

The sub-routine first indexes a pointer to a message (510) which refers to EPROM storage location area. The machine automatically defaults to English and then allows the operator to switch languages using keyboard input or a manually-actuated switch. In response to the control signal for selecting a language the pointer is moved to the selected language. Subsequently the error messages are displayed in the language selected. (3lpp Dwg.No.5/16|

AB- <EP> EP 376741 B

A material processing system comprising a specified material processing station (18) and a plurality of other material processing stations (e.g. 12, 13, 17, 19, 20, 21) and means for directing material to be processed serially through said plurality of stations in a given order to the specified station; each of said plurality of stations and said specified station (18) comprising a separate data and control processor, characterised by:- a communication loop interconnecting the processors (194) of said plurality of stations in said given order to the processor (160) of the specified station (18) and interconnecting said processor of the specified station to the processor of the first of said plurality of stations; said specified station including a display (15), each of said processors (194) comprising means for generating error and status messages generated therein and received from the next succeeding station; the processor (160) of said specified station comprising means for displaying error and status messages received thereby on said display (15); each of said error messages, as they are each received, existing simultaneously in a plurality of memory locations in **different languages**, each of said memory locations occupying a different quantity of memory; means for establishing a pointer for locating as a base one of said languages; means for inputting a control signal for selecting one of said languages; and means responsive to said control signal for moving said pointer to select said one language, whereby consequent upon said selection said error messages are thereafter displayable in each instance in said one language.

Dwg.8/16|

AB- <US> US 5146587 A

The system comprises a number of material processing station, with a base material processing station, and structure directing material to be processed serially through the plurality of stations in a given order to the base station. Each of the number of stations and the base station comprises a separate data and control processor, and further comprises a communication loop interconnecting the processors of the

number of stations in the given order to the processor of the base station and interconnecting the processor of the base station to the processor of the first of the plurality of stations.

Each of the processors of the number of stations comprises structure for generating an error message concerning a respective station, and structure for passing the error message generated therein to the next succeeding station in the communication loop. Each of the processors generates the error message by selecting an appropriate one of a number of messages stored in memory locations associated with each the processor. Each of the number of messages exists simultaneously in a plurality of spoken languages in the memory locations. The processors include structure for selecting the error messages in one of the languages. The base station includes a display, and the processor of the base station comprises means for displaying the error message received thereby on the display.

ADVANTAGE - Can operate at high speeds provides complete control of the collation contents.

(Dwg.5/16)|

DE- <TITLE TERMS> AUTOMATIC; DOCUMENT; COLLATE; ENVELOPE; STUFF; MACHINE;
MODULE; ELECTRONIC; CONTROL; SYSTEM; MODULE; STORAGE; ERROR; MESSAGE;
LANGUAGE; SELECT; USER|
DC- P77; T01; T05; T06; X25|
IC- <MAIN> G05B-019/04; G06F-011/32|
IC- <ADDITIONAL> B07C-001/00; B43M-003/04; B43M-005/04; G06F-003/14;
G06F-015/21; H04L-012/42; H04Q-009/00|
MC- <EPI> T01-J05A ; T05-C; T05-K02; T06-D08A; X25-F02|
FS- EPI; EngPI||

13/4/16 (Item 16 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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AA- 88-103284/198815|
XR- <XRPX> N88-078245|
TI- Contextual data repository searching method - using common set of
search commands translated to search program commands for accessing
repository|
PA- ANONYMOUS (ANON)|
NC- 001|
NP- 001|
PN- RD 287007 A 19880310 198815 B
|
AN- <PR> RD 88287007 A 19880220|
LA- RD 287007(1)|
AB- <BASIC> RD 287007 A

A generic search strategy is used to name, create and search the data repository. Document interchange architecture is supplemented by a library server for supporting creation and maintenance of the repository and searching. The server extracts data from documents and stores them in a separate format for efficient searching. In addition, the server stores process parameters for each contextual search program's commands.

The process parameters operate for translating the generic search strategy into the specific format of the particular data repository. Since each document can be searched by name or keyword the overhead associated with searching a repository consisting of the entire text of a document is avoided.

ADVANTAGE - Single generic language provides access to many data repositories so that us' does not need to learn several **different** search definition **languages** . Maximum flexibility is afforded to user to organise data repositories for searching.|

DE- <TITLE TERMS> DATA; REPOSITORY; SEARCH; METHOD; COMMON; SET; SEARCH;
 COMMAND; TRANSLATION; SEARCH; PROGRAM; COMMAND; ACCESS; REPOSITORY|
 DC- T01|
 IC- <ADDITIONAL> G06F-000/01|
 MC- <EPI> T01-J05A ; T01-J05B|
 FS- EPI||

13/4/17 (Item 17 from file: 351)

DIALOG(R)File 351:DERWENT WPI
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AA- 88-051921/198808|
 XR- <XRPX> N88-039400|
 TI- Displaying system for cost of telephone call - uses microprocessor to
 search memory for cost information for parameters in mathematical
 equation to calculate call charge|
 PA- HEDIN M (HEDI-I)|
 AU- <INVENTORS> HEDIN M|
 NC- 001|
 NP- 001|
 PN- FR 2600850 A 19871231 FR 869472 A 19860630 198808 B
 |
 AN- <LOCAL> FR 869472 A 19860630|
 AN- <PR> FR 869472 A 19860630|
 LA- FR 2600850(13)|
 AB- <BASIC> FR 2600850 A

A number for a telephone call is composed on a keyboard (1) and is
 routed onto the telephone line by an interface (6) which passes the
 dialling pulses to the telephone exchange. A line current detector (4)
 signals the start of the dialling operation to a microprocessor (2)
 where the figures making up the number are identified. A search process
 in a memory (3) is initiated to determine the cost value to be applied.

A mathematical equation contains the various parameters affecting
 the cost such as time of day and call duration. The time is provided by
 a clock (5) and the cost information is applied to a memory (7) for
 addition to previously accrued costs. The cost information is routed to
 an LCD display with a point matrix allowing **different languages** to
 be displayed.

USE/ADVANTAGE - Subscriber metering. Doesn't need taxation
 impulses.

1/1|

DE- <TITLE TERMS> DISPLAY; SYSTEM; COST; TELEPHONE; CALL; MICROPROCESSOR;
 SEARCH; MEMORY; COST; INFORMATION; PARAMETER; MATHEMATICAL; EQUATE;
 CALCULATE; CALL; CHARGE|
 DC- T01; W01|
 IC- <ADDITIONAL> H04M-015/10|
 MC- <EPI> T01-J05A ; W01-C01X; W01-C06|
 FS- EPI||

13/4/18 (Item 1 from file: 347)

FN- DIALOG(R)File 347:JAPIO|
 CZ- (c) 2000 JPO & JAPIO. All rts. reserv.|
 TI- INFORMATION FILTERING DEVICE
 PN- 09-101991 -JP 9101991 A-
 PD- April 15, 1997 (19970415)
 AU- SUMITA KAZUO; ONO KENJI; KAJIURA MASAHIRO; SAKAI TETSUYA; MIIKE SEIJI
 PA- TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)
 AN- 07-335791 -JP 95335791-
 AD- November 30, 1995 (19951130)

IC- -6- G06F-017/60 ; G06F-017/30

CL- 45.4 (INFORMATION PROCESSING -- Computer Applications)

AB- PROBLEM TO BE SOLVED: To efficiently filter articles in plural languages distributed from news sources and to provide them to a user.

SOLUTION: This information filtering device has a reception part 1 for receiving the distribution of text articles from plural news sources, similarity degree calculating part 14 for calculating the degree of similarity between retrieval conditions designated by the user and the text articles, and transmissive article discriminating part 16 for sorting the text articles in the order from the highest degree of similarity and transmitting the fixed number of text articles or only the articles having the degree of similarity higher than a previously decided threshold value to the user. The similarity degree calculating part 14 not only uses the retrieval conditions designated in a certain single language as they are but also translates the retrieval conditions into the other language and calculates the degree of similarity between those translated retrieval conditions and the text articles as well. Therefore, filtering processing can be efficiently executed to various kinds of articles written in **different languages** .

?

?show files;ds

File 348:European Patents 1978-2000/Apr W03

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File 349:PCT Fulltext 1983-2000/UB=, UT=20000413

(c) 2000 WIPO/MicroPatent

Set	Items	Description
S1	423	(BANKING OR MONEY()TRANSACTIONS OR BILL? ?(2N)PAY?) (2N) (HOME OR REMOTE OR REMOTELY OR PDA OR PERSONAL()DIGITAL()ASSISTANT OR TELEPHONE OR PHONE OR SCREEN()PHONE)
S2	1893	(ATM(S) (FINANCIAL OR BANK OR BANKING)) OR AUTOMAT?()TELLER-()MACHINE? ? OR KIOSK? ? OR (REMOTE OR REMOTELY) (2N)FINANCIAL-()SERVICES
S3	3166	(MULTIPLE OR MULTI OR MORE()THAN()ONE OR SECOND OR FOREIGN OR DIFFER? OR VARIOUS OR VARIETY OR BI) (2W) (LANGUAGE? ? OR TONGUE? ? OR DIALECT? ? OR LINGUA? ?)
S4	794	EFT OR ELECTRONIC()FUNDS()TRANSFER?
S5	13	(S1 OR S2 OR S4) (S)S3

?t5/5,k/all

5/5,K/1 (Item 1 from file: 348)

DIALOG(R)File 348:European Patents

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00817167

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method and apparatus for autokey rotor encryption

Verfahren und Einrichtung zur Rotorverschlüsselung mittels variablem Schlüssel

Procede et dispositif de chiffrage par rotor a cle variable

PATENT ASSIGNEE:

AT&T IPM Corp., (1907680), 2333 Ponce de Leon Boulevard, Coral Gables, Florida 33134, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Reeds, James Alexander, III, 127 Southgate Road, New Providence, New Jersey 07974, (US)

LEGAL REPRESENTATIVE:

Watts, Christopher Malcolm Kelway, Dr. (37391), Lucent Technologies (UK) Ltd, 5 Mornington Road, Woodford Green Essex, IG8 0TU, (GB)

PATENT (CC, No, Kind, Date): EP 759669 A2 970226 (Basic)

APPLICATION (CC, No, Date): EP 96305933 960814;

PRIORITY (CC, No, Date): US 516369 950817

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: H04L-009/00;

ABSTRACT EP 759669 A2

A method an apparatus for block or stream encrypting text uses an autokeyed rotational state vector to encrypt plain text to yield cipher text. The text is stored as a block in a buffer of an arbitrary number of bytes. Each byte of plain text in the buffer encrypted to yield a byte of cipher text by using a rotational state vector, and the rotational state vector is updated or changed as a function of one or more of: the cipher text, the plain text and a key. The encryption operation is advantageously a series of alternating non-linear and linear transformations. The method of encryption is advantageously involutory in that the encryption method and apparatus for a given key is identical to the decryption method and apparatus with the same key.

ABSTRACT WORD COUNT: 132

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 970226 A2 Published application (Alwith Search Report ;A2without Search Report)

Withdrawal: 970625 A2 Date on which the European patent application

was withdrawn: 970425

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	1051
SPEC A	(English)	EPAB97	5717
Total word count - document A			6768
Total word count - document B			0
Total word count - documents A + B			6768

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

...SPECIFICATION and assigned to assignee of this invention. Other communication networks, as for example networks linking **automatic teller machines**, use the well-known Data Encryption Standard (DES) to encrypt information. See, National Bureau of...

...imbedded in consumer electronics products. Cryptographic techniques may be executed by program code in a **variety** of programming **languages** such as C, FORTRAN, etc.

The information to be encrypted is known as "plain text..."

5/5,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:European Patents

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00316059

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Multiple language telephone answering machine.

Mehrsprachiger Telefonanrufbeantworter.

Repondeur telephonique en plusieurs langues.

PATENT ASSIGNEE:

HASHIMOTO CORPORATION, (237730), 28-2, Komazawa 2-chome, Setagaya-ku, Tokyo 154, (JP), (applicant designated states: CH;DE;FR;GB;IT;LI)

INVENTOR:

Hashimoto, Kazuo, 28-2 Komazawa-ku 2-chome, Setagaya-ke Tokyo 154, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick Court High Holborn, London WC1R 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 307137 A2 890315 (Basic)
EP 307137 A3 890906
EP 307137 B1 930811

APPLICATION (CC, No, Date): EP 88308115 880901;

PRIORITY (CC, No, Date): JP 87227729 870911

DESIGNATED STATES: CH; DE; FR; GB; IT; LI

INTERNATIONAL PATENT CLASS: H04M-001/65;

CITED PATENTS (EP A): GB 2188812 A; GB 1320970 A

CITED REFERENCES (EP A):

PATENT ABSTRACTS OF JAPAN, vol. 10, no. 75 (E-390) 2132, 25th March 1986; & JP-A-60 220 652 (NIPPON DENKI K.K.) 05-11-1985

ICASSP 82 - IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, Paris, 3rd - 5th May 1982, vol. 3, pages 1661-1663, IEEE, New York, US; D. CIMARUSTI et al.: "Development of an automatic identification system of spoken-languages: phase I"

PATENT ABSTRACTS OF JAPAN, vol. 7, no. 260 (P-237) 1405, 18th November 1983; & JP-A-58 142 479 (NORIKO IKEGAMI) 24-08-1983;

ABSTRACT EP 307137 A2

In response to a first outgoing message from a telephone answering device in an original language, such as English, if a calling party from a country speaks in doubt or he cannot answer it quickly, his voice is

analyzed to determine what language it is in order to send him a second outgoing message in his own language, or else a second outgoing message in the original language is sent out promptly to prevent the calling party from hanging up. The foreign calling party thus can understand the second outgoing message and leave his message on an incoming message tape. It is possible to use the present invention not only in a telephone answering device, but also in a general banking system or in question and answer telephone equipment.

ABSTRACT WORD COUNT: 133

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 890315 A2 Published application (A1with Search Report
;A2without Search Report)
Search Report: 890906 A3 Separate publication of the European or
International search report
Examination: 900411 A2 Date of filing of request for examination:
900213
Examination: 920506 A2 Date of despatch of first examination report:
920318
Grant: 930811 B1 Granted patent
Oppn None: 940803 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	256
CLAIMS B	(German)	EPBBF1	256
CLAIMS B	(French)	EPBBF1	281
SPEC B	(English)	EPBBF1	3117
Total word count - document A			0
Total word count - document B			3910
Total word count - documents A + B			3910

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...SPECIFICATION much time, so that quick access is possible.

In a conventional telephone answering device, only the **original language** 's OGM is recorded as custom. Even if the foreign language's OGM, for instance...

...Hello", "Allo" or the like in response to the first OGM in original language, for **instance** , "Who is speaking, Please?", to select the foreign language's OGM that is most suitable for...

5/5,K/3 (Item 1 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00665125

APPARATUS AND METHOD FOR PROVIDING TRANSACTION SERVICES

PROCEDE ET DISPOSITIF POUR LA REALISATION DE SERVICES TRANSACTIONNELS

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9949431 A2 19990930

Application: WO 99GB927 19990324 (PCT/WO GB9900927)

Priority Application: GB 986843 19980324

Designated States: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN;

CU; CZ; DE; DK; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS;
 JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW;
 MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA;
 UG; US; UZ; VN; YU; ZA; ZW; GH; GM; KE; LS; MW; SD; SL; SZ; UG; ZW; AM;
 AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
 GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
 MR; NE; SN; TD; TG

Main International Patent Class: G07F-019/00;

International Patent Class: G06F-017/60;

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9301

English Abstract

Apparatus and method for providing transaction services, in particular a computer-based transaction machine, such as an ATM, and a method for providing transaction services using said transaction machine. One or more software applications interact with middleware software through functional interfaces that are hardware independent but provide functionality which is implemented in a manner adapted to the capabilities of the particular hardware implementation. Objects provided for standard transaction functions are independent of the interface between the user and the transaction machine, said interface being customisable. The resulting transaction machines are typically combined into networks and these networks may readily be combined to form an Extranet.

French Abstract

La presente invention concerne un procada et un dispositif permettant la raalisation de services transactionnels, et plus particulierement, d'une part une machine transactionnelle construite autour d'un ordinateur telle qu'un terminal bancaire et d'autre part un procada permettant d'assurer des services transactionnels en utilisant cette machine transactionnelle. Un ou plusieurs logiciels d'application sont en interaction avec un logiciel standard personnalisable par l'intermediaire d'interfaces fonctionnelles liees au matariel, mais raalisant des fonctionnalites qui sont mises en oeuvre d'une facon adaptee aux possibilites de la mise en oeuvre particuliere du matariel. Les objets proposes pour les fonctions transactionnelles standard sont independants de l'interface entre l'utilisateur et la machine transactionnelle, laquelle interface est personnalisable. Les machines transactionnelles ainsi raalisees sont raunies de facon a constituer des reseaux, lesquels reseaux sont faciles a associer pour former un Extranet.

Fulltext Availability:

Detailed Description

Detailed Discription

... the user 13 has been inactive for more than a pre-determined time.

14 0 **Multiple language** control. This control allows the language on a web page to be dynamically modified. It 16 does this by retrieving text strings and graphics from 17 a database on the **kiosk**. This means that the user may 18 change languages from any browser page - and therefore...

5/5,K/4 (Item 2 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00652437

AUTOMATED SURVEY KIOSK

POSTE AUTOMATISE DE SONDAGE

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9935600 A2 19990715

Application: WO 99CA12 19990105 (PCT/WO CA9900012)

Priority Application: CA 2223597 19980106

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CZ; DE; DK; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP;
KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX;
NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG;
UZ; VN; YU; ZW; GH; GM; KE; LS; MW; SD; SZ; UG; ZW; AM; AZ; BY; KG; KZ;
MD; RU; TJ; TM; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU;
MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD;
TG

Main International Patent Class: G06F-017/60;

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6815



English Abstract

An automated survey kiosk which is easy to install at a location, does not require access to standard telephone lines, can be easily reprogrammed, has unlimited language capabilities, which permits open-ended answers to inquiries or questions and whose survey responses can be sent directly to a client. The automated survey kiosk for administering a survey includes a touch screen for displaying the survey and for receiving survey responses, the touch screen being operatively connected to a general purpose computer for storing the survey, the general computer including a memory for storing the survey responses, operatively connected to the touch screen; and a wireless modem for transmitting the survey responses at a remote location at predetermined intervals. The automated survey kiosk is programmed to prompt a user for a desired language and then administer the survey in the chosen language. The automated survey kiosk may be remotely reprogrammed with new questions, by altering existing questions or by deleting existing questions, from the location of the research firm, even while a respondent is answering the survey. The survey responses may be transmitted to the research firm, or may be directly sent to the client, who must be equipped with the proper equipment to communicate with the automated survey kiosk. Accordingly, the client can have almost instantaneous access to the latest survey data, and can modify the survey during the survey period. The kiosk is also provided with a microphone in order to permit a respondent to record a verbal answer should the multiple choices offered not adequately describe the respondent's answer.

French Abstract

L'invention concerne un poste automatisé de sondage facile à installer à un emplacement, ne nécessitant pas d'accès à des lignes téléphoniques

classiques, pouvant etre facilement reprogramme et dote de capacites linguistiques illimitees, permettant d'apporter des reponses non limitatives a des enquetes ou des questions et dont les reponses aux sondages peuvent etre directement envoyees a un client. Le poste automatise de sondage comprend un ecran tactile destine a l'affichage du sondage et a la reception des reponses au sondage, l'ecran tactile etant connecte pendant son fonctionnement a un ordinateur universel destine a memoriser le sondage et comprenant une memoire de memorisation des reponses au sondage connectee pendant le fonctionnement a l'ecran tactile; et un modem sans fil destine a transmettre a des intervalles predetermines les reponses au sondage a un emplacement a distance. Le poste automatise de sondage est programme pour inciter un utilisateur a choisir une langue voulue puis pour realiser le sondage dans la langue choisie. On peut reprogrammer a distance le poste automatise de sondage en introduisant de nouvelles questions, en modifiant les questions existantes ou en effacant les questions existantes, a partir du cabinet specialise en recherches, meme au moment ou une personne intersee repond au sondage. Les reponses au sondage peuvent etre transmises au cabinet specialise en recherches ou peuvent etre directement envoyees au client qui doit etre equipe du materiel approprie pour communiquer avec le poste automatise de sondage. Ainsi, le client peut avoir acces presque immediatement aux dernieres donnees du sondage et modifier le sondage pendant la periode de sondage. Le poste comprend egalement un microphone destine a permettre a une personne intersee d'enregistrer une reponse verbale au cas ou les multiples choix offerts ne decrivent pas de maniere adequate la reponse de la personne intersee.

Fulltext Availability:
Detailed Description

Detailed Discription

... ended responses. These challenges are solved by the present invention which is a touch screen, **multi** -media, **multi** -lingual wireless automated survey **kiosk** which gathers and transmits on-site feedback from respondents.

When the device is not being...

5/5,K/5 (Item 3 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00626330

REMOTE ELECTRONIC RETAILING COMMERCE DE DETAIL ELECTRONIQUE A DISTANCE

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9909508 A1 19990225

Appication: WO 98AU655 19980819 (PCT/WO AU9800655)

Priority Application: AU 978673 19970819

Designated States: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU;
CZ; DE; DK; EE; ES; FI; GB; GE; GH; GM; HR; HU; ID; IL; IS; JP; KE; KG;
KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ;
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; US; UZ;
VN; YU; ZW; GH; GM; KE; LS; MW; SD; SZ; UG; ZW; AM; AZ; BY; KG; KZ; MD;
RU; TJ; TM; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC;
NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

Main International Patent Class: G06F-153/00;
Publication Language: English
Filing Language: English
Fulltext Availability:
 Detailed Description
 Claims
Fulltext Word Count: 7498

English Abstract

A product ordering apparatus (i.e. electronic retailing or vending machine) having controller, and input means for product selection, a security identification means (i.e. access card, credit card, driver's licence), and means for enabling or disabling delivery of products (goods) based on the security information (i.e. sufficient credit, age). Wherein further, the product ordering can be executed over a communications network such as the Internet. Payment processing being completed via separate secure payment network. The apparatus also provididng for any duty or tax, dependant on the geographic region, to be automatically added to the sale price of the order.

French Abstract

Cet appareil de passation de commande (une machine de vente ou un distributeur automatique electroniques) possede une unite de commande, une unite d'entree pour le choix des produits, un mecanisme d'identification de securite (une carte-cle, une carte de credit, un permis de conduire) et un dispositif validant ou invalidant la livraison de produits (marchandises) et ce, en fonction de l'information relative a l'identification de securite (credit suffisant, age). La commande de produits peut, en outre, s'effectuer par le biais d'un reseau de transmission, sur l'Internet notamment, et le traitement du reglement s'effectuer par le biais d'un reseau de paiement protege distinct. Cet appareil permet d'ajouter automatiquement au prix de vente tout droit ou toute taxe et ce, selon le secteur géographique.

Fulltext Availability:
 Detailed Description

Detailed Discription

... layer. This allows for third party development of user interface software for vending machines and **kiosks** , whilst retaining the same program code for payment processing, hardware device control, communications, shopping basket...

...within the system. The defined structure of each operating part of the vending machine or **kiosk** or PC based software even allows for each software module to be written in a **different** operating **language** , without affecting operation of other parts of the system. This allows developers of ordering software...

5/5,K/6 (Item 4 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00626323

IMPROVED ELECTRONIC ORDERING AND VENDING SYSTEMS

SYSTEMES ELECTRONIQUES AMELIORES DE COMMANDE ET DE DISTRIBUTION

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9909499 A1 19990225
Application: WO 98AU654 19980819 (PCT/WO AU9800654)
Priority Application: US 9756124 19970819

Designated States: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU;
CZ; DE; DK; EE; ES; FI; GB; GE; GH; GM; HR; HU; ID; IL; IS; JP; KE; KG;
KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ;
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; US; UZ;
VN; YU; ZW; GH; GM; KE; LS; MW; SD; SZ; UG; ZW; AM; AZ; BY; KG; KZ; MD;
RU; TJ; TM; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC;
NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

Main International Patent Class: G06F-017/60;

International Patent Class: G06F-153/00;

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 13101

English Abstract

Method/apparatus of automatic retailing and vending for facilitating
remote ordering of goods/services and provision of goods/services
including plurality of ordering apparatus which are connectable via a
communications network to a host device which includes intelligent retail
shelf to store products, and means for issuing and receiving coupons and
effecting rewards.

French Abstract

Cette invention a trait a une technique ainsi qu'a un appareil de vente
et de distribution automatiques facilitant la prise de commande a
distance de biens et/ou de services ainsi que la distribution de ces
biens et/ou services, comportant plusieurs dispositif de prise de
commande pouvant etre connectes par le biais d'un reseau de transmission
a un dispositif hote pourvu d'une tablette intelligente de vente au
detail servant a stocker les produits ainsi que des mecanismes servant a
delivrer des coupons et a les recevoir ainsi qu'a proceder a des remises.

Fulltext Availability:

Detailed Description

Detailed Discription

... within the system. The defined structure of each operating part of the
vending machine or **kiosk** or PC based software even allows for each
software module to be written in a **different** operating **language** ,
without affecting operation of other parts of the system. This allows
developers of ordering software...

5/5,K/7 (Item 5 from file: 349)

DIALOG(R)File 349:PCT Fulltext

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00585950

SYSTEM FOR CALCULATING OCCASION DATES AND CONVERTING BETWEEN DIFFERENT
CALENDAR SYSTEMS, AND INTELLIGENT AGENT FOR USING SAME

SYSTEME DE CALCUL DE DATES D'EVENEMENTS ET DE CONVERSION ENTRE DIFFERENTS
SYSTEMES DE CALENDRIERS, ET AGENT INTELLIGENT PERMETTANT D'UTILISER CE
SYSTEME

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9830963 A1 19980716

Application: WO 98US628 19980113 (PCT/WO US9800628)

Priority Application: US 9735189 19970114

Designated States: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU;
CZ; DE; DK; EE; ES; FI; GB; GE; GH; GM; GW; HU; ID; IL; IS; JP; KE; KG;
KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ;
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; UZ; VN;
YU; ZW; GH; GM; KE; LS; MW; SD; SZ; UG; ZW; AM; AZ; BY; KG; KZ; MD; RU;
TJ; TM; AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT;
SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG

Main International Patent Class: G06F-017/30;

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 23009



English Abstract

An occasion database and a date converter are provided in a device which allows a user to retrieve restored occasion information (78), whether the occasion occurs in the Gregorian calendar (106) or a non-Gregorian calendar (112). A formula is stored for each occasion to allow its date to be calculated for any given year. The date converter converts between Gregorian and non-Gregorian dates. Conversions from one non-Gregorian calendar to another non-Gregorian calendar may also be performed. An intelligent agent executes date sensitive tasks by using at least one calendar and date calculation module for providing date information necessary to execute the date sensitive tasks. The tasks may be executed at a future time and on a periodic basis. Periodic tasks may be associated with occasions that occur in the Gregorian or non-Gregorian calendar.

French Abstract

L'invention concerne une base de donnees d'evenements et un convertisseur de dates se trouvant dans un dispositif permettant a un utilisateur d'extraire des informations d'evenements (78) reconstituees, que l'evenement ait lieu dans le calendrier gregorien (106) ou dans un calendrier non gregorien (112). On met en memoire une formule pour chaque evenement, pour que la date de cet evenement puisse etre calculee pour n'importe quelle annee donnee. Le convertisseur de dates intervient entre les dates gregoriennes et non gregoriennes. Des conversions entre un calendrier non gregorien et un autre calendrier non gregorien peuvent egalement etre effectuees. Un agent intelligent execute des taches de detection de dates en utilisant au moins un module de calcul de calendrier et de dates de maniere a obtenir des informations de dates necessaires pour executer les taches relatives aux dates. Les taches peuvent etre executees dans le futur, et sur une base periodique. Les taches periodiques peuvent etre associees a des evenements intervenant dans le calendrier gregorien ou dans un calendrier non gregorien.

Fulltext Availability:

Detailed Description

Detailed Discription

... Book-of-Days, similar in appearance and design to various hand-held electronic currency converters, **foreign language** translators, organizers, dictionaries and thesauruses. It may also have plug in cards or cartridges or...

...augment its database of occasions. The apparatus may also be embodied as a stand-alone **kiosk** or as an electronic datebook connected to one or more remote devices, as a network...

5/5,K/8 (Item 6 from file: 349)
 DIALOG(R) File 349:PCT Fulltext
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00541275

AN IMPROVED METHOD AND SYSTEM FOR PERFORMING BANKING TRANSACTIONS,
 INCLUDING HOME BANKING
 PROCEDE ET SYSTEME AMELIORES PERMETTANT D'EFFECTUER DES TRANSACTIONS
 BANCAIRES MEME A DOMICILE

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Patent and Priority Information (Country, Number, Date):

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 Priority Application: US 9615819 19960418

Designated States: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU;
 CZ; DE; DK; EE; ES; FI; GB; GE; HU; IL; IS; JP; KE; KG; KP; KR; KZ; LC;
 LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU;
 SD; SE; SG; SI; SK; TJ; TM; TR; TT; UA; UG; US; UZ; VN; GH; KE; LS; MW;
 SD; SZ; UG; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; CH; DE; DK; ES;
 FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA;
 GN; ML; MR; NE; SN; TD; TG

Main International Patent Class: G06F-000/;

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Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 19733

English Abstract

The Home Services Delivery System will provide multi-function financial services to a user accessible through a Personal Computer System. The Home Services Delivery System is based on a Client-Server architecture and is designed to run under the Microsoft Windows environment. The Home Services Delivery System Client (Client) is a software program provided to the user that runs on the user's PC and accesses a Home Services Delivery System Server via a dial-up line. The Client supports local functions such as installation and configuration, and once on-line, displays screens sent from the Home Services Delivery System Server that handles user input to those screens. The Client infrastructure software provides the basic functions needed to connect to the Server, provides information to authenticate the user, and maintains the connection until the user concludes it. The Client infrastructure software also provides basic help screens on how to configure the software. The Client Software incorporates a Graphical User Interface, which provides a user-friendly method of interaction with the System for the user at their personal computer. This interface allows for the design of a global "look and feel" for consistency of interaction between the user and the underlying Systems, either through the use of this invention at home or through other Systems such as a "< i> customer activated terminal < /i> " (< i> CAT < /i>) or ATM at a kiosk or bank branch. This global "look and feel" can also provide consistency of interaction when a user travels to other countries and accesses the System. The System can be configured by users for use with a preferred language during the installation and configuration of the Client Software. In subsequent sessions, the user will interface with the System using that preferred language. A Home Services Delivery System Server is the collection of one or more computers that connects Home Services Delivery System Clients to the business host and to other external service providers. The Home Services Delivery System Server executes both infrastructure as well as business or region-specific application software on SUN systems hardware. The Server supports encryption key downloading, personal identification number (PIN) unscrambling and PIN encryption. Security is instituted at the hardware level. Services provided include Account Information, Transfer, Customer Service, Payment, Payee List, Direct Debit, Mutual Funds, and transfers of funds between different accounts. The Server configuration allows for subsequent addition of applications to the System as they are developed for future expansion to support new functions.

French Abstract

Cette invention concerne un systeme fournisseur de services a domicile qui offre a un utilisateur des services financiers multi-fonctionnels et accessibles par l'intermediaire d'un systeme d'ordinateur personnel. Ce systeme fournisseur de services a domicile, qui s'appuie sur une architecture client-serveur, est concu pour fonctionner dans un environnement Microsoft Windows. Le client du systeme fournisseur de services a domicile (Client) consiste en un logiciel qui est fourni a l'utilisateur, fonctionne sur son ordinateur personnel, et permet d'accéder a un serveur du systeme fournisseur de services a domicile par l'intermediaire d'une ligne commutée. Le client se charge des fonctions locales telles que l'installation et la configuration et, une fois en ligne, affiche des ecrans envoyés par le serveur du systeme fournisseur de services a domicile qui gere l'entrée de l'utilisateur a ces ecrans.

Le logiciel d'infrastructure du client va fournir les fonctions elementaires necessaires pour se connecter au serveur, fournir des informations afin d'authentifier l'utilisateur, et maintenir la communication jusqu'a ce que ce dernier y mette un terme. Le logiciel d'infrastructure de client va egalement fournir des ecrans d'aide elementaires sur la maniere de configurer le logiciel. Le logiciel client comprend une interface d'utilisateur graphique qui va fournir une methode d'interaction avec le systeme qui est adaptee a l'utilisateur au niveau de l'ordinateur personnel de ce dernier. Cette interface permet egalement de creer une fonction "aperçu et idee" generale de la teneur de l'interaction entre l'utilisateur et des systemes sous-jacents, que ce soit en utilisant le present systeme chez soi ou d'autres systemes tels qu'un "< i> terminal active par un client < /i> " (< i> CAT < /i>) ou un MTA dans un kiosque ou une filiale bancaire. Cette fonction "aperçu et idee" generale permet egalement de donner la teneur de l'interaction lorsque l'utilisateur voyage a l'etranger et accede au systeme. Ce systeme peut etre configure par les utilisateurs et utilise dans une langue voulue lors de l'installation et de la configuration du logiciel client. Lors des sessions suivantes, l'utilisateur va obtenir une interface avec le systeme dans la langue voulue. Le serveur du systeme fournisseur de services a domicile consiste en un ordinateur ou un regroupement de plusieurs ordinateurs qui vont connecter les clients dudit systeme a un hôte de transactions commerciales et a d'autres fournisseurs de services externes. Le serveur du systeme fournisseur de services a domicile fait fonctionner le logiciel d'application concernant les infrastructures et les transactions, ou specifique a une region, sur des systemes informatiques SUN. Le serveur assure le telechargement de la cle de cryptage, le decryptage du numero d'identification personnel, ainsi que le cryptage de ce meme numero. La securite est geree au niveau du materiel informatique. Les services fournis comprennent les informations sur le compte bancaire, les transferts, les services clientele, les paiements, la liste des beneficiaires, le debit direct, les fonds de placement, ainsi que les transferts de fonds entre differents comptes. La configuration du serveur permet d'ajouter par la suite d'autres applications a ce systeme au fur et a mesure qu'elles sont developpees en vue d'une expansion future et afin d'assurer de nouvelles fonctions.

Fulltext Availability:
Detailed Description

Detailed Discription

... banking system under a different interface format. Furthermore, banking transactions may take place in many

- **different languages** . Because a financial institution, such as a bank, may have locations in a number of different countries and cultures, the **remote banking** system of the financial institution must be accessible to users in a number of **different languages** . If separate products must be created for each language, the financial institution is required to...

...which predominantly speaks one language may nonetheless wish to interact with the system in a **different , second language** -- particularly if the **second , different language** is the individual's native language. Also, **differences in languages** arise, not only from country to country, but within countries, cities and even households. Accordingly...

...number of languages without creating the problem and distributing different products, each specific to a **different language** .

Third, an international remote banking system will necessary rely on many

service providers in many...

5/5,K/9 (Item 7 from file: 349)
DIALOG(R) File 349:PCT Fulltext
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00508909

DECISION MAKING SYSTEM AND METHOD

PROCEDE ET SYSTEME DE DECISION

Patent Applicant/Assignee:

MINTZ Alex

Inventor(s):

MINTZ Alex

Patent and Priority Information (Country, Number, Date):

Patent: WO 9709666 A2 19970313

Application: WO 96US13953 19960826 (PCT/WO US9613953)

Priority Application: US 95519898 19950828

Designated States: AU; CA; CN; IL; JP; MX; AT; BE; CH; DE; DK; ES; FI; FR;

GB; GR; IE; IT; LU; MC; NL; PT; SE

Main International Patent Class: G06F-000/00;

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 11531

English Abstract

A system and method for rendering decisions based upon a set of attributes and input from a user. The method contains a combination of compensatory and non-compensatory procedures, as well as a multi-attribute function, to yield an optimal result based upon the input received from the user. Post-decision techniques are also included, such as storing, tracing or analyzing a previously rendered decision. Apparatus is disclosed for housing the system. The apparatus can be a personal or portable computer, a calculator, an on-line or interactive input coupled to a processor and memory, a network or distributed system, or a telephone/television link. A graphic user interface is disclosed that communicates with the user in a user-friendly manner. A matrix of attributes relevant to the products or services under consideration, as well as a relative weight for each attribute to the decision, is presented to the user in a single display window.

French Abstract

Système et procédé permettant d'aboutir à des décisions à partir d'un ensemble d'attributs et d'informations communiquées par l'utilisateur. Le procédé comporte une combinaison de procédures compensatoires et non compensatoires, ainsi qu'une fonction multi-attributs, permettant d'aboutir à un résultat optimal à partir de l'information recue de l'utilisateur. Le système prévoit également des opérations d'après-décision, telles que le stockage, la recherche ou l'analyse d'une décision formulée précédemment. Un appareil abritant ce système est également décrit. L'appareil peut être un micro-ordinateur ou un ordinateur portable, un calculateur, un système de saisie en ligne ou interactive raccorde à un processeur et à une mémoire, un réseau ou un système distribué, ou une liaison téléphone ou télévision. Une interface utilisateur graphique permet au système de communiquer avec l'utilisateur de façon conviviale. Une matrice d'attributs pertinents pour les produits ou services considérés, indiquant le poids de chaque attribut dans la décision, est présentée à l'utilisateur dans une seule fenêtre d'affichage.

Fulltext Availability:
Detailed Description

Detailed Discription

... commonly encountered decisions. The database may include, for example, attributes for consumer goods and appliances, **financial** investments or loan information, as well as user-defined items. In a generic system, many...

...system for car dealers). Examples of such specialized systems can take the form of an **ATM** device or **kiosk** 94 (FIG. 2(b)) having a stand-alone or networked device that provides an answer...

...real estate agents and investment center offices. Other presently contemplated embodiments of the system include **multi -lingual** systems, and installation of the system on pen and voice computers.

One presently preferred graphical...

5/5,K/10 (Item 8 from file: 349)
DIALOG(R) File 349:PCT Fulltext
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00431955

SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION

SYSTEMES ET PROCEDES DE GESTION SECURISEE DE TRANSACTIONS ET DE PROTECTION ELECTRONIQUE DES DROITS

Patent Applicant/Assignee:

ELECTRONIC PUBLISHING RESOURCES INC

Inventor(s):

GINTER Karl L
SHEAR Victor H
SPAHN Francis J
VAN WIE David M

Patent and Priority Information (Country, Number, Date):

Patent: WO 9627155 A2-A3 19960906

Application: WO 96US2303 19960213 (PCT/WO US9602303)

Priority Application: US 95388107 19950213

Designated States: AL; AM; AT; AU; AZ; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; EE; ES; FI; GB; GE; HU; IS; JP; KE; KR; KZ; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; TM; TR; TT; UA; UG; UZ; VN; KE; LS; MW; SD; SZ; UG; AZ; BY; KG; KZ; RU; TJ; TM; AT; BE; CH; DE; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG

Main International Patent Class: G06F-001/00;

International Patent Class: G06F-017/60;

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 205184

English Abstract

The present invention provides systems and methods for electronic commerce including secure transaction management and electronic rights protection. Electronic appliances such as computers employed in accordance with the present invention help to ensure that information is accessed and used only in authorized ways, and maintain the integrity, availability, and/or confidentiality of the information. Secure subsystems used with such electronic appliances provide a distributed

virtual distribution environment (VDE) that may enforce a secure chain of handling and control, for example, to control and/or meter or otherwise monitor use of electronically stored or disseminated information. Such a virtual distribution environment may be used to protect rights of various participants in electronic commerce and other electronic or electronic-facilitated transactions. Secure distributed and other operating system environments and architectures, employing, for example, secure semiconductor processing arrangements that may establish secure, protected environments at each node. These techniques may be used to support an end-to-end electronic information distribution capability that may be used, for example, utilizing the "electronic highway".

French Abstract

Systemes et procedes destines au domaine du commerce electronique, et notamment a la gestion securisee des transactions et a la protection electronique des droits. Les appareils electroniques tels que les ordinateurs utilises conformement a la presente invention permettent d'assurer que les informations ne sont consultees et exploitees que de maniere autorisee, et ils conservent l'integrite, la disponibilite et/ou le caractere confidentiel des informations. Les sous-systemes securises utilises en association avec de tels appareils electroniques constituent un environnement de distribution virtuel distribue (VDE) apte a imposer une chaine securisee de traitement et de commande, par exemple pour la commande et/ou la mesure ou encore le controle de l'utilisation d'informations stockees ou diffusees electroniquement. Cet environnement de distribution virtuel peut servir a proteger les droits de differents individus impliquees dans le commerce electronique et dans d'autres transactions electroniques ou assistees par des moyens electroniques. On a egalement prevu des environnements et architectures de systeme d'exploitation distribues, securises et autres mettant en oeuvre, par exemple, des ensembles de traitement securise a semi-conducteurs pouvant etablir des environnements securises et proteges au niveau de chaque noeud. Ces techniques peuvent servir de soutien pour une fonction electronique de distribution d'informations de bout en bout, cette fonction etant utilisable, par exemple, dans le domaine de l'"autoroute electronique".

Fulltext Availability: Detailed Description

Detailed Discription

... Some Important Features Provided by VDE in Accordance With the Present Invention VDE employs a **variety** of capabilities that serve as a foundation for a general purpose, sufficiently secure distributed electronic...regarding many, if not all, merchant, banking, and on-line financial transactions, including supporting **home banking** activities. A consumer can receive his paycheck and/or investment earnings and/or "authentic" VDE...billing, budgeting, and user identification, for example, paying fees associated with usage of content, performing **home** -121 **banking**, managing advertising services, etc. VDE modular separation of these basic capabilities supports the programming of...

...and/or plural control models applied to differing or entirely different content models (for example, **home banking** versus electronic shopping).

Methods, Other Control Information, and VDE Objects VDE control information (e.g...

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00426774

CONTROL SYSTEMS BASED ON SIMULATED VIRTUAL MODELS
SYSTEMES DE COMMANDE BASES SUR DES MODELES VIRTUELS SIMULES

Patent Applicant/Assignee:

INTERTECH VENTURES LTD

THALHAMMER-REYERO Cristina

Inventor(s):

THALHAMMER-REYERO Cristina

Patent and Priority Information (Country, Number, Date):

Patent: WO 9622575 A1 19960725

Application: WO 96US883 19960117 (PCT/WO US9600883)

Priority Application: US 95373688 19950117; US 95373992 19950117

Designated States: CA; JP; US; US; AT; BE; CH; DE; DK; ES; FR; GB; GR; IE;
IT; LU; MC; NL; PT; SE

Main International Patent Class: G06F-019/00;

International Patent Class: G06F-009/44;

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 138832

English Abstract

This invention describes a computer-based system (112), methods and visual interfaces for providing an integrated development and deployment framework for visual modeling and dynamic simulation of virtual models of complex systems, which can be further integrated with monitoring (108) and control (138) devices to monitor and control the operation of the complex systems modeled (102) and can be used for information retrieval. More particularly, the virtual models in the present invention relate to visual models of biochemical complex systems, comprising sets of icons representing processes and their participants linked into multidimensional pathways (116), further organized in a hierarchy of icons representing discrete time and space compartments, wherein such compartments may contain other compartments, and wherein those modular icons encapsulate in different layers all the information, data, and mathematical models that characterize and define each virtual model.

French Abstract

L'invention porte sur un systeme informatique (112), sur un procede et sur des interfaces representant un cadre de developpement et de deploiement pour le modelage visuel et la simulation dynamique de modeles virtuels de systemes complexes pouvant ensuite etre integres a des dispositifs de controle (108) et de commande (138) d'exploitation des systemes complexes ainsi que des modeles (102) et peuvent etre utilises pour la recherche d'informations. Les modeles virtuels de la presente invention peuvent se rapporter a des modeles visuels de systemes de complexes biochimiques comprenant des ensembles d'icomes representant des processus et leurs participants lies par des chemins pluridimensionnels (116) qui sont ensuite organises selon une hierarchie d'icomes representant des compartiments discrets dans le temps et dans l'espace, lesdits compartiments pouvant en contenir d'autres et lesdites icomes modulaires pouvant englober dans differentes couches toutes les informations, donnees et modeles mathematiques caracterisant et definissant chacun des modeles virtuels.

Fulltext Availability:

Detailed Description

Detailed Discription

... they can exit the c/cle if other set of conditions are met (407) and **differentiate** to another related ctell type characterized by different functions and therefore a different cell c...

5/5,K/12 (Item 10 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00375587

**HOME SERVICES DELIVERY SYSTEM WITH INTELLIGENT TERMINAL EMULATOR
SYSTEME SERVEUR A USAGE DOMESTIQUE POURVU D'UN EMULATEUR DE TERMINAL
INTELLIGENT**

Patent Applicant/Assignee:
TRANSACTION TECHNOLOGY INC

Inventor(s):
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MEDINE Carol A
NAYLOR William

Patent and Priority Information (Country, Number, Date):

Patent: WO 9506384 A1 19950302
Application: WO 94US9722 19940825 (PCT/WO US9409722)
Priority Application: US 93112178 19930825

Designated States: AM; AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; EE;
ES; FI; GB; GE; HU; JP; KE; KG; KP; KR; LT; LU; LV; MD; MG; MN; MW; NL;
NO; NZ; PL; PT; RO; RU; SD; SE; SI; SK; TJ; TT; UA; UZ; VN; KE; AT; BE;
CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG;
CI; CM; GA; GN; NE; SN; TD; TG

Main International Patent Class: H04M-011/08;

International Patent Class: G06F-017/50;

Publication Language: English

Fulltext Availability:
Detailed Description
Claims

Fulltext Word Count: 18502

English Abstract

Systems and methods provide communication between a user-friendly terminal (2), such as a "home terminal" shaped to resemble a conventional telephone (2), and a number of service provider computers such as financial institutions (20a-20d). The system's application software transforms simple user commands into commands understood by the service provider computers (20a-20d). The network host computer (8) supplies messages to the terminal for generating prompts needed to solicit required information from the user, and communicates with the service computers (20a-20d) according to their respective protocols. The invention provides a packet assembler and disassembler (PAD) element within the home terminal itself, allowing fast response time for the customer at the home terminal while retaining the benefits of data error, entry error correction and data transmission error correction.

French Abstract

Des systemes et des procedes assurent la communication entre un terminal convivial (2, 10), tel qu'un "terminal a usage domestique", se presentant sous la forme d'un telephone traditionnel (2), et un certain nombre de serveurs, tels que des organismes financiers (20a-20d). Le logiciel d'application du systeme transforme les commandes utilisateur en commandes comprises par les ordinateurs serveurs (20a-20d). L'ordinateur hote (8) du reseau transmet les messages au terminal pour generer les invites permettant d'interroger l'utilisateur et d'obtenir les informations requises, et communique avec les ordinateurs serveurs (20a-20d) selon leurs protocoles respectifs. L'invention decrit egalement

un assembleur et desassembleur de paquets a l'interieur du terminal a usage domestique lui-meme, ce qui assure un temps de reponse rapide pour le client, au niveau du terminal a usage domestique, tout en ayant l'avantage de permettre les corrections d'erreurs de donnees, d'erreurs d'entrees et d'erreurs de transmission de donnees.

Fulltext Availability:
Detailed Description

Detailed Discription

... in the two versions. Similarly, any "templates" (those brief labels such as for carnrllyng on **automatic teller machine** transactions) also must be differently translated. Further, the screens themselves, which contain explanatory text for...

...that those portions of the applications program which do not have to be changed for **different language** versions are, in fact, not changed and remain the same for all versions.

FIG. 18...

5/5,K/13 (Item 11 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00242991

INTERACTIVE PUMP SYSTEM

SYSTEME A INTERACTION POUR POMPE A CARBURANT

Patent Applicant/Assignee:

HOLLIDGE Peter William

Inventor(s):

HOLLIDGE Peter William

Patent and Priority Information (Country, Number, Date):

Patent: WO 8900974 A1 19890209

Application: WO 88GB651 19880805 (PCT/WO GB8800651)

Priority Application: CA 543862 19870806

Designated States: AT; AU; BB; BE; BG; BJ; BR; CF; CG; CH; CM; DE; DE; DK; FI; FR; GA; GB; HU; IT; JP; LK; LU; MC; MG; ML; MR; MW; NL; NL; NO; RO; SD; SE; SE; SN; SU; TD; TG; US

Main International Patent Class: B67D-005/08;

International Patent Class: B67D-005/14;

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 81215

English Abstract

An interactive pump system capable of interacting with and responding to responses from a user, having a pump (105), a central processing unit (705) connected to the pump (105), and a display and input unit (1407) including a plurality of instruction displays and being connected to the pump and the central processing unit. The pump transmits transaction data concerning fluid pumped to the display and input unit which displays the transaction data, displays one instruction display, and transfers input responses from a user to the central processing unit. The central processing unit processes the input responses and controls the pump according to the responses.

French Abstract

Systeme a interaction pour pompe a carburant, capable d'entrer en

interaction avec des usagers et de reagir aux reponses de ceux-ci, compose d'une pompe (105), d'une unite centrale (705) reliee a la pompe (105) et d'une unite d'affichage et d'entree (1407) comportant plusieurs unites d'affichage d'instructions et qui est reliee a la pompe et a l'unite centrale. La pompe transmet les mouvements concernant le carburant pompe a l'unite d'affichage et d'entree qui affiche ces mouvements, affiche des instructions et transmet a l'unite centrale les reponses d'entree des usagers. L'unite centrale traite les reponses d'entree et commande la pompe en fonction de ces reponses.

Fulltext Availability:
Detailed Description

Detailed Discription

```
... char (cents % 10 + '0', f, 151, 2B5); draw-cancel (credit, language)
  unsigned credit, languagep bitmap *bI language ? W3 : W12, *b2 =
  language ? W21b 2 W20b; copy,bitmap (bij b! -W,origin, b! -> y...

...y-origin); if ( credit cQpy, bitmap 02. v2 -> x- wigin, h2 -> v origml
/* go to kiosk draw-Peceipt~string (s, x, y)

-char

-int x, y;
draw,string Mreceipt,bits, receipt...
?
```

?show files;ds

File 108:Aerospace Database 1962-2000/Apr
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File 8: Ei Compendex(R) 1970-2000/Apr W3
(c) 2000 Engineering Info. Inc.

File 77:Conference Papers Index 1973-2000/Mar
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File 238:Abs. in New Tech & Eng. 1981-2000/Apr
(c) 2000 Reed-Elsevier (UK) Ltd.

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File 103:Energy SciTec 1974-2000/Feb B1
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File 2:INSPEC 1969-2000/Apr W1
(c) 2000 Institution of Electrical Engineers

File 14:Mechanical Engineering Abs 1973-2000/May
(c) 2000 Cambridge Sci Abs

File 94:JICST-EPlus 1985-2000/Jan W3
(c)2000 Japan Science and Tech Corp(JST)

File 438:Library Literature 1984-2000/Mar
(c) 2000 The HW Wilson Co

File 61:LISA(LIBRARY&INFOSCI) 1969-2000/Mar
(c) 2000 Reed Reference Publishing

File 233:Internet & Personal Comp. Abs. 1981-2000/May
(c) 2000 Info. Today Inc.

File 6:NTIS 1964-2000/May W4
Comp&distr 2000 NTIS, Intl Cpyrght All Right

File 144:Pascal 1973-2000/Apr W5
(c) 2000 INIST/CNRS

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info

File 34:SciSearch(R) Cited Ref Sci 1990-2000/Apr W5
(c) 2000 Inst for Sci Info

File 62:SPIN(R) 1975-2000/Mar W4
(c) 2000 American Institute of Physics

File 99:Wilson Appl. Sci & Tech Abs 1983-2000/Mar
(c) 2000 The HW Wilson Co.

Set	Items	Description
S1	1582	(BANKING OR MONEY()TRANSACTIONS OR BILL? ?(2N)PAY?) (2N) (HOME OR REMOTE OR REMOTELY OR PDA OR PERSONAL()DIGITAL()ASSISTANT OR TELEPHONE OR PHONE OR SCREEN()PHONE)
S2	4575	(ATM(S)(FINANCIAL OR BANK OR BANKING)) OR AUTOMAT?()TELLER-()MACHINE? ? OR KIOSK? ? OR (REMOTE OR REMOTELY) (2N)FINANCIAL-()SERVICES
S3	28693	(MULTIPLE OR MULTI OR MORE()THAN()ONE OR SECOND OR FOREIGN OR DIFFER? OR VARIOUS OR VARIETY OR BI) (2W) (LANGUAGE? ? OR TONGUE? ? OR DIALECT? ? OR LINGUA? ?)
S4	3255	EFT OR ELECTRONIC()FUNDS()TRANSFER?
S5	10	(S1 OR S2 OR S4) (S)S3
S6	32	(S1 OR S2 OR S4) AND S3
S7	32	S5:S6
S8	10	S7 AND PY<1997
S9	10	RD (unique items)

?t9/7/all

9/7/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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04200839 E.I. No: EIP95062760943

Title: VSAT-based money order system for India

Author: Ghose, A.; Narayan, S.; Mahalik, S.C.
Corporate Source: ITI Equatorial Satcom Ltd, India
Conference Title: Proceedings of the 10th International Conference on
Digital Satellite Communications. Part 2 (of 2)
Conference Location: Brighton, UK Conference Date: 19950515-19950519
Sponsor: British Telecommunications pls; INTELSAT; IEE
E.I. Conference No.: 43159
Source: IEE Conference Publication n 403/2 1995. IEE, Stevenage, Engl. p
604-610

Publication Year: 1995

CODEN: IECPB4 ISSN: 0537-9987

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications)

Journal Announcement: 9509W1

Abstract: The primary objective of the Indian Postal Service being administered by DOP is to provide service to the public at large. This and the other social objectives restrict DOP from functioning purely on commercial lines. In view of this, a new VSAT-based system aimed at making use of satellite communications technology to enable the DOP to be commercially viable while continuing to meet its social objectives and even introduce newer customer-friendly features and services has been introduced. The system is a logical outcome and extension of the recommendations made by an Expert Committee and is based on the subsequent project reports. 5 Refs.

9/7/2 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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03946468 E.I. No: EIP94091391083

Title: Just say the word for service

Author: Florkey, Cynthia; Krasinski, Daniel J.; Wisowaty, John J.
Corporate Source: AT&T, Naperville, IL, USA
Source: AT&T Technology v 9 n 1 Spring 1994. p 4-9
Publication Year: 1994
CODEN: ATTTEJ ISSN: 0889-8979
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review); A;
(Applications)
Journal Announcement: 9411W2

Abstract: This paper describes AT&T's development of a platform called the Service Circuit Node (SCN), an element of the A-I-Net product family. The SCN integrates a range of speech techniques that include text-to-text (TTS) conversion for male and female voices, speaker-independent whole-word automatic speech recognition, speaker dependent or speaker-independent subword automatic speech recognition, connected digit speech recognition, fax record and send, and, voice announcement creation and playback. The corner to practical speech processing technology has indeed been turned with SCN-based services. But Bell Laboratories research development efforts in speech technology are continuing and opening new horizons. The next corner should reveal services based on these efforts, possibly including: Speaker Verification will allow a system to validate users identities by their voices, augmenting or replacing personal ID codes for, say, automated teller machines and other systems; Speaker identification will enable a a system to identify particular voices from a group of

people. Members of one household may have individual voice dialing lists, so the command call my office spoken by any member would be dialed to the correct office; and **multiple language** support will provide speech recognition and TTS synthesis in a **variety of languages**. This extends speech processing technologies to services in the international markets.

9/7/3 (Item 1 from file: 35)

DIALOG(R) File 35:DISSERTATION ABSTRACTS ONLINE

(c) 2000 UMI. All rts. reserv.

01516679 ORDER NO: AAD96-36759

LANGUAGE SERVICES PLANNING IN THE BANKING INDUSTRY: AN EXAMPLE OF UNPLANNED LANGUAGE POLICY

Author: TOUCHSTONE, ELLEN ELIZABETH

Degree: PH.D.

Year: 1996

Corporate Source/Institution: UNIVERSITY OF SOUTHERN CALIFORNIA (0208)

Source: VOLUME 57/07-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3002. 549 PAGES

This dissertation provides a comprehensive examination of the language policies of banks in the Los Angeles area and the effect of these policies on Spanish-speaking bank customers. Both observation and interview data were collected in seven communities within the Greater Los Angeles area which have high percentages of minority language speakers. By comparing minority language usage for **automatic teller machines**, on brochures and signage and by ascertaining the availability of minority-language-speaking tellers, it was determined that banking services differ significantly from bank to bank and even from branch to branch.

These findings led to focus groups with Spanish-speaking immigrant bank customers to determine how this wide **variety** of minority language servicing strategies affected minority language speakers' access to banking services. Data collected during these focus groups suggest that, indeed, the lack of banking services in minority languages led to feelings of confusion, frustration, and anxiety on the part of the Spanish-speaking customers. Moreover, the lack of minority language services led to Spanish-speaking customers attributing this lack to discrimination and lack of respect for other cultures on the part of the bank. Based on these findings, I conducted a survey of 360 Spanish-speaking immigrant bank customers in Van Nuys--a community which is comprised of 34% Spanish speakers--to determine if the focus group data was representative of the Spanish-speaking population. In the survey, participants were presented with a hypothetical bank offering one of four **different** minority language servicing strategies and later, asked questions about the bank. The bank which did not offer any Spanish services was found to be confusing, disrespectful of other cultures, discriminatory, and, in general, not a bank which the participants would frequent. Conversely, the bank which offered the most Spanish language services was perceived as not confusing, respectful of other cultures, not discriminatory and a bank which the participants would use.

9/7/4 (Item 2 from file: 35)

DIALOG(R) File 35:DISSERTATION ABSTRACTS ONLINE

(c) 2000 UMI. All rts. reserv.

01369527 ORDER NO: AAD94-23569

THE DEVELOPMENT OF THE ELECTRONIC FIELD TRIP TO STRENGTHEN AND ENRICH EXISTING K-12 CURRICULUM (TELECOMMUNICATION)

Author: GARCIA, JUDITH MARIE

Degree: ED.D.

Year: 1993

Corporate Source/Institution: OKLAHOMA STATE UNIVERSITY (0664)

Adviser: KENNETH WIGGINS

Source: VOLUME 55/04-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 849. 179 PAGES

Scope of the project. Today's educators are seeking answers to complex problems regarding quality and equity of instructional opportunities for K-12 students. They are turning to technology to provide distance learning experiences for students as a partial answer to issues of inequity. Most programming provides daily classes to students in courses such as **foreign languages** and mathematics. Prior to 1989, little was done to address inequities regarding enrichment experiences enjoyed by students living in urban areas, where there is easy access to museums, science centers, universities, cultural centers, and the like. This project was designed to create enrichment opportunities for students throughout the country, to be delivered by satellite, for which there would be no cost to the schools. Students anywhere, regardless of fiscal resources or remoteness of their school district would have access to experts, scientists, events, places, and other experiences, that otherwise would not be available to them. The project would also serve as a model other school systems could use to produce similar programming.

Findings, recommendations, and conclusions. The electronic field trip (EFT) developed by Fairfax County Public Schools (FCPS) in Virginia in 1989, consists of four components: print support material, a pretaped orientation program, a live interactive teleconference, and mentoring via computer bulletin board. The EFTs have brought experts into the classroom, with whom students can interact via an 800 number. Recommendations included that an evaluation of the effectiveness of the EFTs be conducted; alternative access to the EFTs; methods to maximize the usefulness and effectiveness of the EFTs; encouragement and advice to teachers to produce local EFTs; and a recommendation that school districts seek support to wire the schools for cable. In conclusion, technology is benefitting schools today by expanding services and providing access to outside resources, such as the EFTs, that otherwise would not be available to them. The EFTs have continued to evolve and are receiving sufficient outside support to allow FCPS to continue to offer them at no cost to the schools. The increasing numbers of registrations and evaluations indicate that the objective of the EFTs, to strengthen and enrich existing K-12 curriculum, is being fulfilled.

9/7/5 (Item 3 from file: 35)

DIALOG(R) File 35:DISSERTATION ABSTRACTS ONLINE

(c) 2000 UMI. All rts. reserv.

786922 ORDER NO: AAD82-19717

THE DEVELOPMENT OF SYNTAX IN THE WRITING OF UNIVERSITY ESL STUDENTS

Author: LIM, HO-PENG

Degree: PH.D.

Year: 1982

Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, LOS ANGELES (0031)

Source: VOLUME 43/04-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 1133. 186 PAGES

Teachers preparing English as a **Second Language** (ESL) students for university-level work have for some time felt the need for a direct measure of their students' ability to produce syntactically mature prose. An instrument which could directly measure **second language** learners' ability to control syntactic structures while attempting to produce mature writing, would be of practical value to ESL teachers interested in

facilitating the language development of their students.

The purpose of this study was to discover what might be learned about the development of syntax in the writing of 120 university ESL students by utilizing the following seven indices of syntactic complexity: (1) mean words per clause (W/C), (2) mean clauses per T-unit (C/T), (3) mean words per T-unit (W/T), (4) mean T-units per sentence (T/S), (5) mean words per sentence (W/S), (6) mean words per error-free T-unit (W/EFT), and (7) mean error-free T-units per sentence (EFT /S). The relationship of the free writing and rewriting output of the subjects was examined using the above syntactic indices. Two different categories of ESL subjects, representing three levels of English language proficiency, were examined for their free writing and rewriting abilities.

The analysis revealed that although the trends shown for the seven syntactic indices of complexity in rewriting were similar to those shown in free writing, the data obtained for free writing were very much more revealing than those obtained for rewriting, particularly in helping to discriminate between levels of English language proficiency among the subjects. The more proficient subjects were more expressive, writing more words per T-unit and more words per error-free T-unit in both free writing and rewriting: there were positive linear trends toward longer T-units and longer error-free T-units as the subjects exhibited higher proficiency in the English language. Of the seven indices of syntactic complexity used in the present study, mean error-free T-units per sentence (EFT /S) was the best indicator of language development in the writing of university English as a **Second Language** students. The second best index was mean words per error-free T-unit (W/EFT) and the third best index was mean words per T-unit (W/T).

9/7/6 (Item 1 from file: 202)

DIALOG(R) File 202:Information Science Abs.

(c) Information Today, Inc. All rts. reserv.

00003039 6800039

BOEKENVERKOOP IN OPENBARE BIBLIOTHEEK; EEN INTERVIEW MET DE
BIBLIOTHEKARIS VAN HALSINGBORG. (BOOKSELLING IN THE PUBLIC LIBRARY; AN
INTERVIEW WITH THE LIBRARIAN OF HALSINGBORG.).

Document Type: Journal Article

Author (Affiliation): NO AUTHOR LISTED

Journal: OPENBARE BIBLIOTHEEK

Publication Language(s): English

Source: OPENBARE BIBLIOTHEEK 10(4), 110 (1967 MAY).

THE CITY LIBRARIAN OF HALSINGBORG INITIATED AN EXPERIMENT WHICH HAS BEEN IN OPERATION SINCE NOVEMBER 1966. STIMULATING BOOK OWNERSHIP IS A PROPER FUNCTION OF THE LIBRARIAN; THERE IS IN SWEDEN A GENERAL RELUCTANCE TO ENTER A BOOKSHOP, AND WITH THE EXPECTED ABOLITION OF RESALE PRICE MAINTENANCE THE STOCKHOLDING BOOKSELLER NEEDS SUPPORT. THE THREE BOOKSHOPS IN THE CITY SIGNED A JOINT CONTRACT, HIRING LIBRARY SPACE AT A NOMINAL COST AND TAKING THREE-MONTH TURNS AT PROVIDING STAFF AND STOCK. THE KIOSK IS SITUATED ALONG THE MAIN TRAFFIC FLOW AND HAS ROOM FOR 500-600 TITLES. THE QUALITATIVE NORMS FOR STOCK SELECTION ARE THE SAME AS THOSE FOR THE LIBRARY, WITH SPECIAL EMPHASIS ON POPULAR BOOKS FOR WHICH THERE IS A WAITING LIST, GOOD PAPERBACKS (BOTH FICTION AND NON-FICTION), AND CHILDREN'S BOOKS OF A HIGH STANDARD. THERE IS NO FIXED PRICE LIMIT. IT IS BEING FOUND THAT MANY PEOPLE PREFER WAITING TO BUYING AND THAT THE PROBLEM OF THE WAITING LIST HAS NOT BEEN SOLVED. IN PRACTICE CHILDREN'S BOOKS AND PAPERBACKS, INCLUDING FOREIGN LANGUAGES AND ESPECIALLY ENGLISH, ARE THE MOST POPULAR. TURNOVER WAS BRISK BEFORE CHRISTMAS BUT DECLINED AFTERWARDS; IT IS OFTEN STIMULATED BY AUTHORS AUTOGRAPHING BOOKS AND MAKING PERSONAL APPEARANCES. IN ORDER TO MAKE THE PROJECT TRULY VIABLE MORE

SPACE WOULD BE NEEDED; AN ADDITIONAL PROBLEM IS THAT THE SALARIED BOOKSELLING ASSISTANT IS FREQUENTLY UNDEREMPLOYED, BUT IT IS POSSIBLE THAT THE LIBRARIAN MAY IN FUTURE ASSUME RESPONSIBILITY FOR STAFFING THE KIOSK . (Abstract Source: LSCAA)

9/7/7 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2000 Institution of Electrical Engineers. All rts. reserv.

03385321 INSPEC Abstract Number: D89001432

Title: Multi- language **ATMs talk to consumers**

Author(s): Debow, Y.

Journal: Computers in Banking vol.6, no.3 p.16, 19

Publication Date: March 1989 Country of Publication: USA

CODEN: CBANE6 ISSN: 0742-6496

Language: English Document Type: Journal Paper (JP)

Treatment: General, Review (G); Practical (P)

Abstract: In response to ever increasing competition for retail accounts, Chemical **Bank**, Citibank, and Chase Manhattan **Bank** are targeting ethnic segments of the population with alternative language **ATM** terminals. Although far from a national phenomenon, a number of large and small institutions, from Hawaii to New Hampshire, are using existing and evolving software technology to attract customers and increase fee income-with a bonus of media attention. For example, Chemical **Bank** unveiled in December 1988-to coincide with Soviet Premier Gorbachev's visit to New York-an English/Russian bilingual **ATM** in the Sheepshead Bay, Brooklyn section of New York. **Bank** of Hawaii, which uses NCR terminals, has been greeting Japanese tourists to the Islands with English/Japanese screens since November 1987. (0 Refs)

9/7/8 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2000 Institution of Electrical Engineers. All rts. reserv.

03145413 INSPEC Abstract Number: C88036993

Title: Simon Fraser University's new interactive learning system to teach French as a second language

Author(s): Kirchner, G.

Author Affiliation: G.K. Educ. Consultants, West Vancouver, BC, Canada

Journal: Optical Information Systems vol.8, no.1 p.38-43

Publication Date: Jan.-Feb. 1988 Country of Publication: USA

CODEN: OISYE4 ISSN: 0886-5809

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: In 1984 Simon Fraser University received a government grant to design an interactive learning system to teach French as a **second language**. The system was to be used as an individual workstation for one or two learners. In addition, the instructional program would have to use a communicative or functional approach to learning the language. Finally, the initial part of the instructional program was to be 80 percent oral emphasis with a gradual increase in written or typed exercises. The workstation contains an Amiga 1000 with a 2 MB memory expansion, Genlock, Sony 1000 A, sound digitizer, amplifier and two speakers. All equipment is stored in a **kiosk** with access to programs via a mouse or keyboard. Utilizing a sampling rate of 28000 bytes, the sound system provides 2 minutes of RAM voice input and approximately 30 seconds of voice storage on the floppy disk. The feature allows the instructional designers to create materials and programs that emphasize oral input, immediate voice comparisons and a chronological storage of learner voice samples throughout the instructional program. (0 Refs)

9/7/9 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2000 Institution of Electrical Engineers. All rts. reserv.

02823513 INSPEC Abstract Number: B87013337, C87011665

Title: Interrogation languages: from tree structuring to natural language

Author(s): Guichard, F.

Conference Title: Data Processing: From Discourse to Method. Convention Informatique 1986 p.105-7 vol.1

Publisher: Convention Inf, Paris, France

Publication Date: 1986 **Country of Publication:** France 2 vol. (v+523+431) pp.

ISBN: 2 902574 20 7

Conference Date: 15-19 Sept. 1986 **Conference Location:** Paris, France

Language: French **Document Type:** Conference Paper (PA)

Treatment: General, Review (G)

Abstract: Natural language is the main communication process between people. Natural language is only possible between two people speaking naturally the same language. Using a **foreign language** is less natural than using native language. Beyond language, intelligence, intuition and experience allow a very close communication with few words. Communication process between a man and a videotex service is a perfectable compromise between the ability of one relation to the other. It is proposed to study the evolution of the videotex languages for the general public depending on technical and economical constraints of **kiosk** billing. (0 Refs)

9/7/10 (Item 1 from file: 99)

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

(c) 2000 The HW Wilson Co. All rts. reserv.

1263193 H.W. WILSON RECORD NUMBER: BAST95058965

Street smarts

AUGMENTED TITLE: ObjectSoft Corp.'s creation of an electronic City Hall

Sarna, David E. Y; Febish, George J

Datamation v. 41 (Oct. 1 '95) p. 31-2

DOCUMENT TYPE: Feature Article **ISSN:** 0011-6963

ABSTRACT: ObjectSoft Corporation in Englewood, New Jersey, is one of four vendors competing in a demonstration project to prove the feasibility of an electronic city hall. In a time of cutbacks, layoffs, and downsizing, it is difficult to provide improved services to the public while reducing the cost per transaction. New York City has formulated an approach whereby clerks are replaced with technology and the private and public sectors cooperate. Thus, a contract to install computers in strategically placed **kiosks** has just been approved. Challenges facing ObjectSoft were to provide the public with something accessible, fast, and fun to use while not bothering the legacy systems; to provide central control and management to minimize costly service calls; to make **kiosks** accessible to as many people as possible, including those speaking **foreign languages** or challenged by physical disabilities; and to get these **kiosks** built and deployed quickly. The problems experienced in the project so far and the methods used to solve them are described.

?

?show files;ds

File 15:ABI/INFORM(R) 1971-2000/May 08
 (c) 2000 Bell & Howell
 File 88:Gale Group Business A.R.T.S. 1976-2000/May 10
 (c) 2000 The Gale Group
 File 9:Business & Industry(R) Jul/1994-2000/May 10
 (c) 2000 Resp. DB Svcs.
 File 13:BAMP 2000/Apr W5
 (c) 2000 Resp. DB Svcs.
 File 623:Business Week 1985-2000/Apr W5
 (c) 2000 The McGraw-Hill Companies Inc
 File 810:Business Wire 1986-1999/Feb 28
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 File 610:Business Wire 1999-2000/May 10
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 File 647:CMP Computer Fulltext 1988-2000/Apr W5
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 File 275:Gale Group Computer DB(TM) 1983-2000/May 10
 (c) 2000 The Gale Group
 File 674:Computer News Fulltext 1989-2000/Mar W2
 (c) 2000 IDG Communications
 File 98:General Sci Abs/Full-Text 1984-1999/Oct
 (c) 1999 The HW Wilson Co.
 File 47:Gale Group Magazine DB(TM) 1959-2000/May 10
 (c) 2000 The Gale group
 File 75:TGG Management Contents(R) 86-2000/Apr W5
 (c) 2000 The Gale Group
 File 239:Mathsci 1940-2000/Jun
 (c) 2000 American Mathematical Society

Set	Items	Description
S1	16764	(BANKING OR MONEY()TRANSACTIONS OR BILL? ?(2N)PAY?) (2N) (HOME OR REMOTE OR REMOTELY OR PDA OR PERSONAL()DIGITAL()ASSISTANT OR TELEPHONE OR PHONE OR SCREEN()PHONE)
S2	51219	(ATM(S)(FINANCIAL OR BANK OR BANKING)) OR AUTOMAT?()TELLER-()MACHINE? ? OR KIOSK? ? OR (REMOTE OR REMOTELY)(2N)FINANCIAL-()SERVICES
S3	47187	(MULTIPLE OR MULTI OR MORE()THAN()ONE OR SECOND OR FOREIGN OR DIFFER? OR VARIOUS OR VARIETY OR BI)(2W)(LANGUAGE? ? OR TONGUE? ? OR DIALECT? ? OR LINGUA? ?)
S4	10706	EFT OR ELECTRONIC()FUNDS()TRANSFER?
S5	99	(S1 OR S2 OR S4)(S)S3
S6	53	(S1 OR S2 OR S4)(10N)S3
S7	103	S5 OR S6
S8	59	S7 AND PY<1997
S9	51	RD (unique items)

?t9/3,k/all

9/3,K/1 (Item 1 from file: 15)
 DIALOG(R)File 15:ABI/INFORM(R)
 (c) 2000 Bell & Howell. All rts. reserv.

01175179 98-24574

Albania in the twilight zone: The perseritje model and its impact on small business

Dana, Leo Paul

Journal of Small Business Management v34n1 PP: 64-70 Jan 1996

ISSN: 0047-2778 JRNL CODE: JSB

WORD COUNT: 3521

...TEXT: per month). American music is no longer prohibited.

Whereas Russian and Chinese were formerly the **second languages** in Albania, many Albanians have learned Italian on television, and English will doubtlessly become popular...

...a statue of Stalin used to stand, there is now Pink Floyd graffiti on a **kiosk** selling imported cigarettes. A package of Marlboros sells for 150 leks (compared to 15 or...

9/3,K/2 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)
(c) 2000 Bell & Howell. All rts. reserv.

01146728 97-96122
Atlanta's transit system "trains" for 1996 Olympics
Hudson, Kari
American City & County v111n1 PP: 30, 34+ Jan 1996
ISSN: 0149-337X JRNL CODE: AMC
WORD COUNT: 2752

...TEXT: are expected during the Games.

Visitors will be able to input areas of interest into **kiosk** computers, which will be able to handle several **different languages**, and view travel and public transportation information according to location from the digital map. They...

9/3,K/3 (Item 3 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)
(c) 2000 Bell & Howell. All rts. reserv.

01034462 96-83855
Tomorrow's merchants make shopping easier, more entertaining
Liebeck, Laura
Discount Store News v34n10 PP: 43, 45 May 15, 1995
ISSN: 0012-3587 JRNL CODE: DSN
WORD COUNT: 1805

...TEXT: millennium will be more entertaining to shop in with a wider use of high-tech **kiosks**, store-within-a-store programs, try-me areas and cross-merchandising displays. Also, stores will...

... themed-based merchandisers, especially in the area of licensing and seasonal programs, category displays and **multi -lingual** packaging and signing for greater appeal across wide demographic areas.

The early years of the...

9/3,K/4 (Item 4 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)
(c) 2000 Bell & Howell. All rts. reserv.

00859890 95-09282
Power to the people
Noack, David
American City & County v109n6 PP: 40-56 May 1994
ISSN: 0149-337X JRNL CODE: AMC
WORD COUNT: 4957

...TEXT: city services.

Users can get directions to Carnegie Hall or get a marriage license. The **kiosks** are **multi - lingual** , offer text, video, graphics and can be accessed 24 hours a day.

Recently, Texas installed...

9/3,K/5 (Item 5 from file: 15)

DIALOG(R)File 15:ABI/INFORM(R)

(c) 2000 Bell & Howell. All rts. reserv.

00831912 94-81304

Designing information technology for people

Etherington, William A

Business Quarterly v58n3 PP: 103-106 Spring 1994

ISSN: 0007-6996 JRNL CODE: BSQ

WORD COUNT: 2569

...TEXT: and the successful impact of human-centric technology is Barcelona's Expo 1992. About 200 **kiosks** were set up around the Expo grounds. At the heart of each was a computer terminal--but it was not called that. Children and adults speaking a dozen **different languages** actually waited in line to work with programs that were people-friendly. No matter what...

... users had, the computers and their software never let them down. You could use the **kiosks** : to make dinner reservations, to explore what various restaurants looked like, to book a time...

9/3,K/6 (Item 6 from file: 15)

DIALOG(R)File 15:ABI/INFORM(R)

(c) 2000 Bell & Howell. All rts. reserv.

00745071 93-94292

Global software player securing stronger Canadian presence

Strom, Janine

I.T. Magazine v25n7 PP: 35 Jul 1993

ISSN: 0008-3364 JRNL CODE: CAD

WORD COUNT: 3569

...TEXT: the company or a fax-back form to receive more information.

Future plans for the **kiosk** include expansion of the multimedia database to over 300 Canadian firms represented in **multiple languages** , and placement of **kiosks** at international business trade forums around the world.

HIGH-TECH CEOS CALL FOR ACTION

We...

9/3,K/7 (Item 7 from file: 15)

DIALOG(R)File 15:ABI/INFORM(R)

(c) 2000 Bell & Howell. All rts. reserv.

00695504 93-44725

De-mystifying multimedia

Gayeski, Diane M

Communication World v10n4 PP: 27-32 Apr 1993

ISSN: 0744-7612 JRNL CODE: CMW
WORD COUNT: 2309

...TEXT: If your training department has used interactive video, or if your marketing department has created **kiosks** for retail or trade show use, you can capitalize on their skills and investment in...

... ROMs, the technology is still extremely useful for providing customized video presentations. Work stations or **kiosks** can be placed in employee meeting rooms, lobbies, or cafeterias to provide news and information...

... or customized for a particular audience group, such as different types of work assignments or **different languages**. We helped Amway design an interactive videodisc **kiosk** for their internal trade show attended by their distributors; this game-like program quizzed users...

9/3,K/8 (Item 8 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)
(c) 2000 Bell & Howell. All rts. reserv.

00416128 88-32961
The Next Generation of ATMs
Loughran, Tim
Bankers Monthly v105n8 PP: 38-43 Aug 1988
ISSN: 0005-5476 JRNL CODE: BKM

ABSTRACT: While **automated teller machines (ATM)** are used rarely by 50%-75% of retail **bank** customers in the US, bankers and **ATM** builders continue to envision the technology at the center of every **bank**'s retail operations. Advances have made ATMs faster, more accurate, and more durable than human tellers, of whom there is a shortage. Banks and **ATM** vendors must work together to increase retail customer comfort and confidence in using the technology...

... the current generation of ATMs include touch tone, color screens, high resolution graphics, instructions in **various languages**, cutoff statements, and the ability to move quickly between deposits, payments, and transfers. Future enhancements are likely to simplify machine use. **ATM** location also is being studied carefully. Both banks and **ATM** designers foresee a future wherein the machines are the focus of both funds transfer and...

9/3,K/9 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2000 The Gale Group. All rts. reserv.

04004838 SUPPLIER NUMBER: 18583438
Racing around Atlanta - the high-tech way. (new transportation technologies)
State Legislatures, v22, n7, p10(1)
July-August, 1996
ISSN: 0147-6041 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 374 LINE COUNT: 00033

... visitors over a 17-day period.

The city has placed more than 130 touch-screen **kiosks** in bus and rail stations, airports, hotels, office buildings, visitor centers, rest areas and shopping centers. The **kiosks** provide travelers with current traffic data, vehicle routes and public transportation schedules in **multiple languages** as well as tourist information, Olympic schedules and

weather forecasts. The colorful screen displays include...

19960717

9/3,K/10 (Item 2 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2000 The Gale Group. All rts. reserv.

04001710 SUPPLIER NUMBER: 18570776

Art and diplomacy in Ottoman Constantinople.

Mansel, Philip

History Today, v46, n8, p43(7)

August, 1996

ISSN: 0018-2753 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4186 LINE COUNT: 00334

... in Poland.

The meetings of ambassadors and Grand Viziers, in the Porte or a private kiosk, appeared to be a collision between two worlds: they wore different costumes, spoke different languages and followed different religions. In reality, through their respective interpreters they spoke a common language...

19960800

9/3,K/11 (Item 3 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2000 The Gale Group. All rts. reserv.

03742935 SUPPLIER NUMBER: 17532434 (USE FORMAT 7 OR 9 FOR FULL TEXT)

NATPE International. (National Association of Television Program Executives annual conference and exhibition in Las Vegas, Nevada) (Brief Article)

Freeman, Michael

MEDIAWEEK, v5, n42, p13(1)

Nov 6, 1995

DOCUMENT TYPE: Brief Article

ISSN: 1055-176X

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 284 LINE COUNT: 00023

TEXT:

...bar-coded "swipe" badges allowing attendees to access program and exhibitor information; telephones at selected kiosks will offer translation of 180 different languages; a soon-to-be-launched online NATPE Web site will offer conference information; and there...

19951106

9/3,K/12 (Item 4 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2000 The Gale Group. All rts. reserv.

02455323 SUPPLIER NUMBER: 09337865 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Europe '92: cultural borders will remain.

The Futurist, v24, n5, p57(2)

Sept-Oct, 1990

CODEN: FUTUA

ISSN: 0016-3317

LANGUAGE: English

RECORD TYPE:

Fulltext

WORD COUNT: 484 LINE COUNT: 00042

... as wen as within countries such as Belgium, where different segments of the population speak **different languages** . For instance, 'smart kiosks , ' or interactive information terminals, can give expert product-choice guidance to shoppers, operating in several languages simultaneously. Interactive 'smart kiosks ' are far and away the best way to cut through existing language and cultural gaps...

19900900

9/3,K/13 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01644423 (USE FORMAT 7 OR 9 FOR FULLTEXT)
EDS Gives TX Network A Five-Year Lease On Life
(Electronic Data Systems will acquire the regional electronic funds transfer network TX Network; EDS plans on a variety of innovative ATM products)
Bank Network News, v 15, n 10, p 3
October 11, 1996
DOCUMENT TYPE: Newsletter (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 936

(USE FORMAT 7 OR 9 FOR FULLTEXT)

ABSTRACT:
...EDS will start introducing new ATM features by early 1997. These features may include couponing, **multiple languages** , statement-rendering, advertising and instant loans through ATMs.
...

TEXT:
...suburban members," he says.

Innovations

By early 1997, Marcous says, EDS will begin introducing new **ATM** features that may include couponing, **multiple languages** , statement-rendering, advertising and instant loans through ATMs. Marcous says TX will provide an opportunity to test these services in an interchange environment, where a cardholder from one **bank** can access them at the ATMs owned by another member. TX members will be offered...

9/3,K/14 (Item 2 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01640784 (USE FORMAT 7 OR 9 FOR FULLTEXT)
IBM Plans Domino-Based Payroll, Benefits Software
(IBM unveiled plans for first quarter 1997 release of payroll and benefits components for its new HR Access package)
Newsbytes News Network, p N/A
October 23, 1996
DOCUMENT TYPE: Journal (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 506

ABSTRACT:
...Web and Lotus Notes through Lotus's Domino, plus the ability for

simultaneous use in **multiple languages** . The already released first module in HR Access, HR Specialist Workbench (HRS), is designed to...

...will ultimately be able to access payroll, benefits and other HR information through the Web, **kiosks** and "800"-number interactive voice response (IVR) systems, as well as from the desktop.

9/3,K/15 (Item 3 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
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01469989

New York Thrift's ATMs User-Friendly in 6 Languages
(Greater New York Savings Bank installs automated teller machines with instructions in 6 different languages)
American Banker, v CLXI, n 76, p 27
April 22, 1996
DOCUMENT TYPE: Journal ISSN: 0002-7561 (United States)
LANGUAGE: English RECORD TYPE: Abstract

(Greater New York Savings Bank installs automated teller machines with instructions in 6 different languages)

ABSTRACT:

Greater New York Savings Bank has installed **automated teller machines** with instructions in 6 languages. These languages are Yiddish, Portuguese, Creole, Spanish and English. The...

...may not have control of the English language. In addition to the ATMs that feature **various languages** , Ms Lufty stated that Greater New York Savings is planning to to open new branches...
...customer service representatives who speak the more popular neighborhood languages and it prints brochures in **multiple languages** .

9/3,K/16 (Item 4 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
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01413781

DDE ORG TO ENTER HIGHER-END BANKING SOLUTIONS MARKET
(DDE ORG Systems to distribute Temenos Systems financial software systems to banks in India)
Economic Times, p 13
February 20, 1996
DOCUMENT TYPE: Journal ISSN: 0013-0389 (India)
LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT:

...being set up in India. DOSL plans to offer both high end and low-end **banking** solutions. Globus offers **ATM** connectivity, multi-currency, multi-branch and **multi -lingual** solutions. DOSL has also launched a low-end **banking** solutions packages - Integrated Branch Accounting System (IBAS) for public sector and co-operative banks. DOSL...

9/3,K/17 (Item 5 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01395091 (USE FORMAT 7 OR 9 FOR FULLTEXT)

The ATM Makeover: Automated Teller Or Vending Machine?

(According to estimates, by the year 1997, one-third of all retail banking transactions will be processed via ATMs)

Bank Technology News, v 13, n 2, p 1+

February 1996

DOCUMENT TYPE: Journal ISSN: 1060-3506 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1742

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

BY JOANNA KOLOR

The **automated teller machine**, once something of a bank wallflower, is fast becoming a machine with personality and wanderlust...

...people that use them, they can be amusing or straightforward, simple or complex, communicate in **multiple languages** and come in variety of shapes and sizes.

There's no doubt ATMs have overcome...

9/3,K/18 (Item 6 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2000 Resp. DB Svcs. All rts. reserv.

01269305 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Levi's Creates Cutting-Edge Kiosk

(Original Levi's Store opened in Manhattan; features in-store kiosk to aid customers in 4 different languages)

AdWeek East, v XXXVI, n 35, p 13

August 28, 1995

DOCUMENT TYPE: Journal ISSN: 0199-2864 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 66

(USE FORMAT 7 OR 9 FOR FULLTEXT)

(Original Levi's Store opened in Manhattan; features in-store kiosk to aid customers in 4 different languages)

TEXT:

...Original Levi's Store opening last week in Manhattan, Levi's launched an in-store **kiosk** to assist customers in four **different languages**. It includes metric size conversion information, a "living catalog" enabling consumers to mix and match...

9/3,K/19 (Item 7 from file: 9)

DIALOG(R)File 9:Business & Industry(R)

(c) 2000 Resp. DB Svcs. All rts. reserv.

01232158 (USE FORMAT 7 OR 9 FOR FULLTEXT)

CD-ROMS, ISDN, THEN TV

(Oracle Systems launches its Oracle Media Objects multimedia authoring software)

Multichannel News, v 16, n 27, p 33+

July 03, 1995

DOCUMENT TYPE: Journal ISSN: 0276-8593 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 639

(USE FORMAT 7 OR 9 FOR FULLTEXT)

ABSTRACT:

...a PC version to follow soon. Many applications for OMO include interactive training, interactive shopping **kiosks** , medical and **foreign language** services and video-embedded map programs.
...

TEXT:

...service based on full-motion video.

Other interactive applications on hand: interactive training, interactive shopping **kiosks** , medical and **foreign language** services and video-embedded map programs.

Developers present at the briefing called OMO a serious...

9/3,K/20 (Item 8 from file: 9)

DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01180702 (USE FORMAT 7 OR 9 FOR FULLTEXT)

China: Guangzhou joins Visa/PLUS

(China joins Visa International's PLUS ATM network, giving cardholders access to local currency)

Electronic Payments International, n 97, p 2

May 1995

DOCUMENT TYPE: Newsletter ISSN: 0954-0393 (Ireland)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 690

ABSTRACT:

...will be open 24 hr/d, 7 d/wk, and provide on-screen instructions in **multiple languages** .

Guangzhou, which offered 23% GDP growth in 1993, vs national GDP growth of 9%, and...

9/3,K/21 (Item 9 from file: 9)

DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01053576 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Could Virtual Reality Interactive Replace GUIs

(Techno Marketing introduced a graphical user interface based on interactive virtual reality rather than static buttons and screens)

Newsbytes News Network, p N/A

September 21, 1994

DOCUMENT TYPE: Journal (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 434

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...like a movie.

TMI prepares its specialized presentation disks for use in electronic training, in **kiosks** , and for use as product marketing tools. It can

prepare a presentation in a **foreign language** or in **multiple languages** and will help the client design the presentation.

The company says it has minimized the...

9/3,K/22 (Item 10 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01046513 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Floppies For Use By PCs, Macs Simultaneously
(Techno-marketing Inc offers floppy disk formatting software that lets
floppies be used on both IBM-type machines and Macintosh)
Newsbytes News Network, p N/A
August 26, 1994
DOCUMENT TYPE: Journal (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 478

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:
...virtually any kind of machine."

Moon sees the technology as ideal for applications such as **multi - language kiosks** in international airports or dissemination of information to a wide audience.

While Twin Media is...

9/3,K/23 (Item 11 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2000 Resp. DB Svcs. All rts. reserv.

01029526
Marketing for CreataCard intensifies
(American Greetings launches national ad campaign for its CreataCard kiosk system)
Chain Drug Review, v 16, n 13, p 149
June 20, 1994
DOCUMENT TYPE: Journal ISSN: 0164-9914 (United States)
LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT:
...Greetings Corp (Cleveland, OH) is launching a multimillion-dollar national ad campaign for its CreataCard **kiosk** system, which was launched in 10/92. The **kiosks** allow users to combine various elements from about 1,600 seasonal, **foreign language** and everyday designs to create their own greeting card. The new campaign, to consist of...

...future, radio, print and TV ads will be integrated. There are almost 8,000 CreataCard **kiosks** now operating in mass market outlets and gift and card shops. The CreataCard division reported...

9/3,K/24 (Item 1 from file: 13)
DIALOG(R)File 13:BAMP
(c) 2000 Resp. DB Svcs. All rts. reserv.

01024685 00816093

Browsing the Web Via Bank-Deployed Kiosks

(Some banks using touch screen-based Web browsers to present information to potential customers)

Bank Systems & Technology, v 33, n 11, p 18

November 1996

DOCUMENT TYPE: Journal ISSN: 1045-9472 (United States)

LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT:

...supports Windows NT, is being utilized by some 50 companies at public WebStations placed in **kiosks** or tabletop touch monitors. Its settings run from college campuses to information regarding Mount Rushmore...

...turned into promotional and transactional tools, as well as acquiring maximum exposure at minimum expense. **Multi -language** support is offered in Chinese, Portuguese, Swedish, Korean, Japanese, French, English, German, and Spanish. It...

9/3,K/25 (Item 2 from file: 13)

DIALOG(R)File 13:BAMP

(c) 2000 Resp. DB Svcs. All rts. reserv.

01024622 00814571 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Putting The Smart ATM's Brain Power To Work

(New ATMs incorporate powerful microprocessors, but few banks appear to be taking advantage of the technology)

Article Author(s): Davis, Donald

Financial Service ONLINE, p 61-64

November 1996

DOCUMENT TYPE: Journal ISSN: 0746-892X (United States)

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2494

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...banks have created applications of 50 megabytes and more to accommodate sophisticated animation along with **multiple languages**. And once these applications are downloaded to the **ATM**, they must still be managed, which requires a kind of two-way communication between the terminal and the **bank** not required previously. "You not only have to download new software, but tell the **ATM** when the new software should take off and when the old software should shut down...

9/3,K/26 (Item 1 from file: 810)

DIALOG(R)File 810:Business Wire

(c) 1999 Business Wire . All rts. reserv.

0601774 BW0067

PACIFIC BELL CARDMOBILE: San Francisco's Newest Tourist Attraction Makes Visitors Feel Right At Home

July 09, 1996

Byline: Business Editors/Telecommunications & Travel Writers

...inside and out)

-- Official Prepaid Visitor Card posters positioned throughout the city on San Francisco **Kiosks**

INTERVIEW OPPORTUNITIES:

-- **Bi lingual** Cardmobile staff is available to discuss what it's like to work the German/Japanese...

9/3,K/27 (Item 2 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0469628 BW1057

OGDEN: OGDEN AWARDED 11-YEAR LEASE FOR 107TH FLOOR OBSERVATION DECK AT WORLD TRADE CENTER

March 10, 1995

Byline: Business Editors

...will
take visitors on an aerial sightseeing tour of New York City and environs; interactive, **multi lingual kiosks** at various viewing points; a nightly rooftop light show that will be visible for miles...

9/3,K/28 (Item 3 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0298174 BW026

AT & T: AT&T installs 179 of the AT&T Public Phone 2000 at Los Angeles International Airport

September 25, 1992

Byline: Business Editors and Telecommunications Writers

...graphics and text. Both the screens and functions keys work in the same manner as **automated teller machines** , making the phone easy to operate. A special feature, **foreign language** screens, provides dialing instructions in French, Spanish and German.
The first information service to be...

9/3,K/29 (Item 4 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0245273 BW742

AT & T: AT&T announces pay phone of tomorrow - a public phone that can function as a "portable office" for travelers on the road

October 2, 1991

Byline: Business Editors/Travel & Hospitality Writers

...graphics and text. Both the screens and functions keys work in the same manner as **automated teller machines** , making the phone easy to operate. A special feature, **foreign language** screens, provides dialing

instructions in French, Spanish and German.
The first information service to be...

9/3,K/30 (Item 5 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0186580 BW095

Business Wire Recap

July 27, 1990

Byline: TRAVEL/HOSPITALITY EDITORS

...cruise (BW624 8:05)
(SECURITY-PACIFIC/NCR) SEATTLE--Creates goodwill for Games
travelers with its multi - lingual automated teller machine
(BW011 8:40)
(BART) OAKLAND, Calif.--Breaks ground for 1,550-space parking
project at...

9/3,K/31 (Item 6 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0185513 BW011

**SECURITY PACIFIC NCR: Security Pacific creates goodwill for Games travelers
with its multi- lingual automated teller machine**

July 23, 1990

Byline: Business/News Editors

**Security Pacific creates goodwill for Games travelers with its multi-
lingual automated teller machine**

...now access their PLUS and VISA
accounts using Security Pacific Bank of Washington's new
multi lingual automated teller machine (ATM) at Sea-Tac
International Airport.
Korean and Chinese language capabilities will be added within...

9/3,K/32 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2000 CMP. All rts. reserv.

01018485 CMP ACCESSION NUMBER: CWK19940530S1593

Middleware Links Apps

JOHN COX
COMMUNICATIONSWEEK, 1994 , n 507, 9
PUBLICATION DATE: 940530
JOURNAL CODE: CWK LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: Network Applications
WORD COUNT: 942

, 1994

... users work with analog and digital video, animation, graphics and audio for computer-based training, **kiosks** and other networked applications. The software lets users work in a **variety** of programming **languages** including Visual Basic, Access, C or C++, or any other environment supporting dynamic link libraries...

9/3,K/33 (Item 2 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2000 CMP. All rts. reserv.

00598730 CMP ACCESSION NUMBER: IWK19911014S0928
PAY PHONE POWER (MISCELLANY)
INFORMATIONWEEK, 1991 , n 342, 54
PUBLICATION DATE: 911014
JOURNAL CODE: IWK LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: MISCELLANY
WORD COUNT: 697

, 1991

... high-resolution graphics and text. The screen and keys operate in a similar fashion to **automated teller machines** . In addition , the screen provides **foreign -language** dialing instructions, which are displayed in French, Spanish, and German.

The first on-line information...

9/3,K/34 (Item 3 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2000 CMP. All rts. reserv.

00542204 CMP ACCESSION NUMBER: CRN19931122S0550
Video for Windows 1.1 aimed at VARs
HEATHER CLANCY
COMPUTER RESELLER NEWS, 1993 , n 554, 28
PUBLICATION DATE: 931122
JOURNAL CODE: CRN LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: NEWS
WORD COUNT: 408

, 1993

... the ability to associate multiple audio streams with a video clip. For example, a promotional **kiosk** video could include audio tracks in several **different languages** .

Other features that are included in the product are installable renderers, which allow developers to...

9/3,K/35 (Item 4 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2000 CMP. All rts. reserv.

00541443 CMP ACCESSION NUMBER: IWK19930118S5377
Interactive Multimedia: PRESSING ALL THE RIGHT BUTTONS - Kiosks let companies deliver a tailored pitch or product
Linda Wilson
INFORMATIONWEEK, 1993 , n 408, 42
PUBLICATION DATE: 930118
JOURNAL CODE: IWK LANGUAGE: English
RECORD TYPE: Fulltext

SECTION HEADING: BUSINESS STRATEGIES
WORD COUNT: 1277

, 1993

... multimedia programs housed in free-standing displays efficiently deliver a tailored sales pitch or product. **Kiosks** are portable, allowing them to go where the customers are, be it a **bank** lobby, a grocery store, or a company cafeteria. The software is interactive, so information can be customized for such individual needs as **foreign languages**. And with **banking's automated teller machines (ATM)**, which work in a similar fashion, now a standard feature of the American landscape, the time needed to acquaint users with the **kiosk** concept is virtually nil. **Kiosk** software also records every transaction, helping companies build customer databases.

Cheap And Easy
Like an...

9/3,K/36 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01749556 SUPPLIER NUMBER: 16623239 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Build a multilingual user interface for your application with Win32.

(includes related articles on local ID and local parameterization, and resources in multiple languages in a Win32 file) (Tutorial)

Freytag, Asmus

Microsoft Systems Journal, v10, n4, p61(15)

April, 1995

DOCUMENT TYPE: Tutorial ISSN: 0889-9932 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 7357 LINE COUNT: 00586

... maybe you've been asked to deliver a single product for a country in which **more than one language** is spoken. For whatever the reason, more and more people are becoming interested in what...

19950400

9/3,K/37 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01701405 SUPPLIER NUMBER: 16254046 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Could virtual reality interactive replace GUIs.

Mallory, Jim

Newsbytes, NEW09210008

Sept 21, 1994

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 476 LINE COUNT: 00037

... like a movie.

TMI prepares its specialized presentation disks for use in electronic training, in **kiosks**, and for use as product marketing tools. It can prepare a presentation in a **foreign language** or in **multiple languages** and will help the client design the presentation.

The company says it has minimized the...

19940921

9/3,K/38 (Item 3 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01540396 SUPPLIER NUMBER: 12683848 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Strike up the band width. (upgrading desktop microcomputers and networks to
take advantage of new multimedia technology) (includes related article on
meeting the multimedia microcomputer standard and a multimedia glossary)**
(Cover Story)

Koffman, Gail

LAN Magazine, v7, n11, p38(9)

Nov, 1992

DOCUMENT TYPE: Cover Story ISSN: 0898-0012 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 4777 LINE COUNT: 00380

... closely at topics that interest them.

You may also find multimedia turning up in information **kiosks** that
point visitors in the right direction or guide a user through a process.
For...

...of Social Services in Tulare County, CA, guides visitors through the
application process with a **kiosk** system that uses video and a
touch-screen monitor that displays text in **multiple languages** .

Multimedia will also come to life via electronic mail. Add voice
capability to a networked...

19921100

9/3,K/39 (Item 4 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01480238 SUPPLIER NUMBER: 12139222

**Banking firm tightens belt, makes technology prove itself. (Sanwa Bank
California)**

Bozman, Jean S.

Computerworld, v26, n18, p51(2)

May 4, 1992

ISSN: 0010-4841 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: same time reducing costs. Among the projects the MIS
department is working on are new **automated teller machine** screens
with **multiple languages** and a new cash management system that runs on
an IBM System/88 computer. Sanwa...

19920504

9/3,K/40 (Item 5 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01467157 SUPPLIER NUMBER: 11577904 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Macau: bank pioneers online ATMs with CSSL software. (automated teller
machines) (Banco Commercial de Macau)**

Wingrove, Norman

Newsbytes, NEW12040026

Dec 4, 1991

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 590 LINE COUNT: 00046

The **bank** is the first in Macau to link ATMs directly to the Equation international **banking** system using Kapiti's new Equation/ATM gateway. The ATMs will offer a **multi** -currency, **multi** -lingual service with the unique ability to print immediate updates to customer's passbooks.

"CSSL has...

19911204

9/3,K/41 (Item 6 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

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01454334 SUPPLIER NUMBER: 11463643 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Pay phone of tomorrow: AT&T Public Phone 2000 as "portable office".

EDGE, on & about AT&T, v6, n167, p38(1)

Oct 7, 1991

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 594 LINE COUNT: 00047

... graphics and text. Both the screens and functions keys work in the same manner as **automated teller machines**, making the phone easy to operate. A special feature, **foreign language** screens, provides dialing instructions in French, Spanish and German.

The first information service to be...

19911007

9/3,K/42 (Item 7 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

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01451797 SUPPLIER NUMBER: 11373873 (USE FORMAT 7 OR 9 FOR FULL TEXT)

AT&T announces new packet switch, pay phone. (BNS-1000, Public Phone 2000)

(Product Announcement)

Blankenhorn, Dana

Newsbytes, pNEW10020022

Oct 2, 1991

DOCUMENT TYPE: Product Announcement LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 167 LINE COUNT: 00013

... plug for laptop PCs or fax machines as well as a keyboard like those on **automated teller machines**, through which customers could get electronic mail or link to other dial-up services through their home or offices. The phones, which also offer **foreign language** services, are already being used at the Dallas/Fort Worth International Airport.

(Dana Blankenhorn/19911002...

19911002

9/3,K/43 (Item 8 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

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01430333 SUPPLIER NUMBER: 10612995 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Speech processing: multi-lingual speech modules now available to U.S.

manufacturers for integrated voice remote control, response. (Lernout & Hauspie Speechproducts, N.V.'s multifunction, multi-lingual voice

processing PC board and voice processing modules, algorithms,
applications generation software and packaged systems) (Product
Announcement)

EDGE: Work-Group Computing Report, v2, n46, p10(1)

April 8, 1991

DOCUMENT TYPE: Product Announcement LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 899 LINE COUNT: 00076

... control or other speech-based capabilities into their products.

The L&H products -- including its **multi** -function, **multi** -lingual
voice processing PC board and voice processing modules, algorithms,
applications generation software and packaged systems - currently are used
in Europe in **telephone banking** , mail order response, voice mail and
other applications in which human speech reponse, voice mail...

19910408

9/3,K/44 (Item 9 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01426497 SUPPLIER NUMBER: 10624153 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Lernout & Hauspie takes multilingual speech recognition technology to the
US. (Lernout & Hauspie Speechproducts NV)

Computergram International, n1656, pCGI04190013

April 19, 1991

ISSN: 0268-716X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 273 LINE COUNT: 00025

... products are designed to enable computers and machines to
understand and produce human speech in **different languages** . Its
flagship product, just launched in the US, is a **multi** -lingual speech
board for personal computers. And, according to the company, the 901PIM-C25
personal computer...

...board and speech processing modules, algorithms, applications
development software and bundled systems - are used in **telephone banking**
, mail order response, and voice mail applications. Lernout & Hauspie aims
to expand geographically via joint...

19910419

9/3,K/45 (Item 10 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

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01291351 SUPPLIER NUMBER: 07131918 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Multi- language **ATMs talk to customers.** (automated teller machines
)

DeBow, Yvette

Computers in Banking, v6, n3, p16(2)

March, 1989

ISSN: 0742-6496 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1066 LINE COUNT: 00086

Multi- language **ATMs talk to customers.** (automated teller machines
)

...ABSTRACT: and-see attitude and may institute the technology in the

future. IBM began developing the **multi -language** technology in 1970 in response to the international market focus.

TEXT:

Multi -Language ATMs Talk to Consumers NEW YORK--In response to ever increasing competition for retail accounts, Chemical **Bank** , Citibank, and Chase Manhattan **Bank** are targeting ethnic segments of the population with alternative language **ATM** terminals. Although far from a national phenomenon, a number of large and small institutions, from...

19890300

9/3,K/46 (Item 11 from file: 275)
DIALOG(R) File 275:Gale Group Computer DB(TM)
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01241891 SUPPLIER NUMBER: 06492815 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Simon Fraser University's new interactive learning system to teach French as a second language. (technical)
Kirchner, Glenn
Optical Information Systems, v8, n1, p38(6)
Jan-Feb, 1988
DOCUMENT TYPE: technical ISSN: 0886-5809 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 3159 LINE COUNT: 00247

...ABSTRACT: received a government grant to design an interactive learning system to teach French as a **Second Language** . The system was to be used as an individual workstation for one or two learners...

...Genlock, Sony 1000A, sound digitizer, amplifier and two speakers. All equipment is stored in a **kiosk** with access to programs via a mouse or keyboard. Utilizing a sampling rate of 28...

...material will be used to design three levels of instruction to learn French as a **Second Language** . (Reprinted by permission of the publisher.)

19880100

9/3,K/47 (Item 12 from file: 275)
DIALOG(R) File 275:Gale Group Computer DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01241861 SUPPLIER NUMBER: 06495143 (USE FORMAT 7 OR 9 FOR FULL TEXT)
GTE wins deal to install VSAT network for U.S. bank. (First Union National Bank)
Winokur, L.A.
MIS Week, v9, n13, p7(1)
March 28, 1988
ISSN: 0199-8838 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 856 LINE COUNT: 00068

... be used to meet First Union's requirements to connect several different operating systems with **different languages** and protocols at each branch bank, to serve such applications as **automated teller machines** (ATMs) and Demand Deposit Accounting, GTE Spacenet said.

The system will also give First Union...

19880328

9/3,K/48 (Item 1 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
(c) 2000 IDG Communications. All rts. reserv.

045214

All 401Ks Are Not The Same

Client/Server Journal Special June 1995 Issue, VITAL STATISTICS
**OBJECT-BASED FLEXIBILITY IS MERCER'S KEY TO MAKING MONEY AS A BENEFITS
OUTSOURCER**

Byline: Mary Brandel
Journal: Computerworld
Publication Date: June 01, 1995
Word Count: 465 Line Count: 46

Publication Year: 1995

Text:

...Complicating things even more, Mercer wanted to provide three front-end options: PCs, touch-screen kiosks and phones, each written with a different scripting language. If a client had different front ends, that meant multiple places for code rewrites when...

9/3,K/49 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2000 The Gale group. All rts. reserv.

04434289 SUPPLIER NUMBER: 17907739 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Liability issues, social needs dictate design. (transportation
planners) (Public Transportation)**

American City & County, v111, n1, p38(1)

Jan, 1996

ISSN: 0149-337X LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1029 LINE COUNT: 00088

... comply with government funding requirements.

Visitors will be able to input areas of interest into kiosk computers, which will be able to handle several different languages, and view travel and public transportation information according to location from the digital map. They...

19960100

9/3,K/50 (Item 2 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2000 The Gale group. All rts. reserv.

04228453 SUPPLIER NUMBER: 15534572 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**90210 rolls out the red carpet for World Cup '94. (Beverly Hills, CA,
festival celebrating world cup soccer) (includes related articles and
calendar of events) (Special Advertising Section)**

Los Angeles Magazine, v39, n7, pS1(5)

July, 1994

ISSN: 0024-6522 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2907 LINE COUNT: 00232

... ensure that no questions go unanswered. Open for the entirety of World Cup month, the kiosk will be staffed by 75 multi-lingual, specially trained residents, who will offer information on and directions to restaurants, shops and hotels in 23 different languages including sign. There's also the World Cup Hospitality & Exhibition Center in the

Grand Rotunda...

19940700

9/3,K/51 (Item 3 from file: 47)

DIALOG(R)File 47:Gale Group Magazine DB(TM)
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03617178 SUPPLIER NUMBER: 11197258 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Plugging into constituencies: as technology continues to advance, the ability of local government to communicate with its constituency does so also.

Thompson, Stephanie
American City & County, v106, n8, p67(4)
August, 1991

CODEN: ACCOD ISSN: 0149-337X LANGUAGE: ENGLISH RECORD TYPE:
FULLTEXT
WORD COUNT: 1697 LINE COUNT: 00137

... the screen, and in many cases will allow its users to print out information.

The **kiosks** may be located in libraries, grocery stores, shopping malls or anywhere the public can reach them. (Interestingly enough, **kiosks** placed in elderly centers are rarely used. It seems the older generation is not interested in communicating through a machine.) And, 24-Hour City Halls can communicate in **more than one language**. In Phoenix, Ariz., for instance, the system incorporates both English and Spanish. Hawaii's state...

19910800

?

?show files;ds

File 624:McGraw-Hill Publications 1985-2000/May 10
 (c) 2000 McGraw-Hill Co. Inc
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 File 553:Wilson Bus. Abs. FullText 1982-1999/Sep
 (c) 1999 The HW Wilson Co

Set	Items	Description
S1	38894	(BANKING OR MONEY()TRANSACTIONS OR BILL? ?(2N)PAY?) (2N) (HOME OR REMOTE OR REMOTELY OR PDA OR PERSONAL()DIGITAL()ASSISTANT OR TELEPHONE OR PHONE OR SCREEN()PHONE)
S2	115914	(ATM(S)(FINANCIAL OR BANK OR BANKING)) OR AUTOMAT?()TELLER-()MACHINE? ? OR KIOSK? ? OR (REMOTE OR REMOTELY)(2N)FINANCIAL-()SERVICES
S3	74526	(MULTIPLE OR MULTI OR MORE()THAN()ONE OR SECOND OR FOREIGN OR DIFFER? OR VARIOUS OR VARIETY OR BI)(2W)(LANGUAGE? ? OR TONGUE? ? OR DIALECT? ? OR LINGUA? ?)
S4	30308	EFT OR ELECTRONIC()FUNDS()TRANSFER?
S5	315	(S1 OR S2 OR S4)(S)S3
S6	169	(S1 OR S2 OR S4)(10N)S3
S7	320	S5 OR S6
S8	147	S7 AND PY<1997
S9	100	RD (unique items)

?t9/3,k/all

9/3,K/1 (Item 1 from file: 624)
 DIALOG(R)File 624:McGraw-Hill Publications
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00796797

PENNIES FROM HEAVEN

Aviation Week & Space Technology September 30, 1996; Pg 19; Vol. 145, No.

14

Journal Code: AW ISSN: 0005-2175

Section Heading: Airline Outlook

Word Count: 155 *Full text available in Formats 5, 7 and 9*

BYLINE:

COMPILED BY FRANCES FIORINO

TEXT:

Swissair plans to install an in-flight **automatic teller machine (ATM)** in one of its Boeing 747-300 transports to evaluate passenger acceptance and use. The **ATM**, furnished by Aero-design Technology of Valencia, Calif., will accept and exchange a wide variety...

... filled with currency and coins, is about 150 lb. Like most ATMs it will accept **bank**, credit and debit cards, using an encrypted satellite telecommunications link to verify transactions on-line. Machine instructions will be available to passengers in a **variety of languages**. The **ATM** will interface with the aircraft's flight management computer so it can issue appropriate ``destination...

1996

9/3,K/2 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2000 The Gale Group. All rts. reserv.

01412588 Supplier Number: 46598656 (USE FORMAT 7 FOR FULLTEXT)

TWO FREE DELTA TICKETS TO BE OFFERED TWICE DAILY AT CENTENNIAL OLYMPIC PARK

PR Newswire, p0801ATTH025

August 1, 1996

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 294

... are not transferable and are valid through January 15, 1997.

Delta's Flight of Dreams **kiosks** in the AT&T Consumer Pavilion at the Global Olympic Village feature five computer screens that link **bi-lingual** reservations representatives live to **kiosk** users via videoconferencing technology. Reservation representatives provide fare, flight and other information in French, English...

19960801

9/3,K/3 (Item 2 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2000 The Gale Group. All rts. reserv.

01404754 Supplier Number: 46549781 (USE FORMAT 7 FOR FULLTEXT)

FIDELITY BANCORP REPORTS THIRD QUARTER EARNINGS UP 12 PERCENT

PR Newswire, p716CLTU011

July 16, 1996

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 2174

... customers more flexibility in obtaining information about their accounts. E-ZBank, an automated voice response **telephone banking** system, gives customers access to account information 24 hours-a-day from anywhere in the...

...basis, an increasing number of customers are discovering the simple convenience of E-ZBank. This **multi-lingual** system also relieves customer service staff of answering routine telephone inquiries and redirects their time...

19960716

9/3,K/4 (Item 3 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2000 The Gale Group. All rts. reserv.

01357097 Supplier Number: 46219694 (USE FORMAT 7 FOR FULLTEXT)
GAMMA PRODUCTIONS ANNOUNCES SUPPORT FOR MICROSOFT ACTIVEX TECHNOLOGIES
PR Newswire, p312SESP013
March 12, 1996
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 588

... need to develop a single application that will run across platforms and support virtually all **foreign languages**. Example applications are Microsoft Windows(r) based **Automated Teller Machines**, Information **Kiosks**, Internet enabled **home banking**, travel and insurance services, and government intelligence, foreign service, and military applications. Our customer's...

19960312

9/3,K/5 (Item 4 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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01313937 Supplier Number: 45885408 (USE FORMAT 7 FOR FULLTEXT)
SANWA BANK CALIFORNIA OPENS 'PROTOTYPE BANK OF TOMORROW' IN DALY CITY
PR Newswire, p1025LA067
Oct 25, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 431

The new branch, located at 327 S. Mayfair Ave., features new **multi - lingual** Interbold ATMs in a state-of-the-art security setting, a telephone information center connected to the bank's new 24-hour **telephone banking** center, and a contemporary floor plan allowing customers easy access to customer service representatives.

Designed...

19951025

9/3,K/6 (Item 5 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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01298059 Supplier Number: 45662720 (USE FORMAT 7 FOR FULLTEXT)
THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS ON CRUISE SHIPS: AVAILABLE AND ECONOMICALLY VIABLE TODAY
PR Newswire, pN/A
July 10, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 517

... time. Content is virtually unlimited with delivery response time of less than two seconds in **multiple languages**.

Cruise ship passengers can access interactive multimedia applications on lobby **kiosks** or in-cabin to select ship's itinerary information, read descriptions of activities and services...

19950710

9/3,K/7 (Item 6 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2000 The Gale Group. All rts. reserv.

01297334 Supplier Number: 45631532 (USE FORMAT 7 FOR FULLTEXT)
**ORACLE MEDIA OBJECTS NOW AVAILABLE OVER THE INTERNET; FIRST \$99 MULTIMEDIA
AUTHORING TOOL**
PR Newswire, pN/A
June 26, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1075

... including "CD Now," a music shopping
service. Other showcase applications include interactive training,
interactive shopping **kiosks** , medical and **foreign language**
curricula,
and video-embedded map programs.
"Interactive media cannot be restricted by a certain application...
19950626

9/3,K/8 (Item 7 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2000 The Gale Group. All rts. reserv.

01284955 Supplier Number: 45392641 (USE FORMAT 7 FOR FULLTEXT)
**OGDEN A WARDED 11-YEAR LEASE FOR 107TH FLOOR OBSERVATION DECK AT WORLD
TRADE CENTER**
News Release, pN/A
March 10, 1995
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 328

... will
take visitors on an aerial sightseeing tour of New York City and
environs; interactive, **multi -lingual kiosks** at various viewing
points; a nightly rooftop light show that will be visible for miles
...
19950310

9/3,K/9 (Item 1 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

03307272 Supplier Number: 46792850 (USE FORMAT 7 FOR FULLTEXT)
EDS Gives TX Network A Five-Year Lease On Life
Bank Network News, v15, n10, pN/A
Oct 11, 1996
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 904

... suburban members," he says.
Innovations
By early 1997, Marcous says, EDS will begin introducing new **ATM**
features that may include couponing, **multiple languages** ,
statement-rendering, advertising and instant loans through ATMs. Marcous

says TX will provide an opportunity to test these services in an interchange environment, where a cardholder from one **bank** can access them at the ATMs owned by another member. TX members will be offered...
19961011

9/3,K/10 (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

03227022 Supplier Number: 46616690 (USE FORMAT 7 FOR FULLTEXT)
OLIVETTI: Olivetti teams up with Newham Council and The Met for ground-breaking information system
M2 Presswire, pN/A
August 9, 1996
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 595

... will not be become a disadvantaged group of information have-nots."
Two trial multi-media **kiosks** went live in Newham last month. Designed to encompass the whole community, the system will later feature **multi -lingual** and sign-language facilities. In an area such as Newham, where at least thirteen **different languages** are spoken, and with resident deaf people, such extras are essential.
Simon Norbury, deputy director...
19960809

9/3,K/11 (Item 3 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02794408 Supplier Number: 45669181 (USE FORMAT 7 FOR FULLTEXT)
Company Designing Interactive Media Systems
Multimedia Networking Newsletter, v3, n5, pN/A
July 15, 1995
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 265

... interactive multimedia system for a hospital's LAN which will support everything from interactive lobby **kiosks** to guide patients and visitors to the appropriate area of the hospital to in-room...

...Internet, check out and more. Employee education can be delivered right to desktop PCS in **multiple languages** . As course work continues and is completed, reports are automatically generated for accreditation in employee...
19950715

9/3,K/12 (Item 4 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02734834 Supplier Number: 45548967 (USE FORMAT 7 FOR FULLTEXT)
MULTIMEDIA KIOSKS COME OF AGE - NORTH COMMUNICATIONS ANNOUNCES NEW ASSOCIATIONS, PRODUCTS, OPEN STANDARD
M2 Presswire, pN/A
May 18, 1995
Language: English Record Type: Fulltext

Document Type: Newswire; Trade
Word Count: 940

... includes complete software, production, and systems management training, and marketing rights to the software and **kiosk** enclosures. North Communications designs, installs and operates complex public access touchscreen networks; these networks often feature online transactions, credit and debit card payment, **multiple languages**, forms dispensing and advanced digital video. The privately-held company, based in Marina del Rey

19950518

9/3,K/13 (Item 5 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02689411 Supplier Number: 45453892 (USE FORMAT 7 FOR FULLTEXT)
CABINET OFFICE (OPSS) PRESS OFFICE - G7 COUNTRIES TO GO ON-LINE
M2 Presswire, pN/A
April 4, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 564

... videoconferencing Government to citizen
Interactive Government On-line * Interaction in the home and in libraries * **Multi -lingual** interfaces * International information via local **kiosks**
Government to business
On-line transaction processing * electronic processing * tax self-assessment * licensing applications
NOTES...

19950404

9/3,K/14 (Item 6 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02639433 Supplier Number: 45344425 (USE FORMAT 7 FOR FULLTEXT)
COUNCIL TURNS FOR MULTI-LINGUAL VIDEOCONFERENCING
Telecomworldwire, pN/A
Feb 20, 1995
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 116

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...Borough of Newham has installed a new videoconferencing link between its council offices to provide **multi -lingual** translation services to its multicultural residents. The council says that the project is the first...

...assistance with forms and documentation from an interpreter over the video link. A multimedia information **kiosk** will be installed in its council-tax department in the future.

19950220

9/3,K/15 (Item 7 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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02622580 Supplier Number: 45307229 (USE FORMAT 7 FOR FULLTEXT)
**LERNOUT & HAUSPEE SPEECH PRODUCTS OFFERS MULTI-LINGUAL SPEECH TECHNOLOGIES
ON DIALOGIC ANTARES PLATFORM**

Modem User News, v7, n2, pN/A

Feb, 1995

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 484

... leadership position of Dialogic in the international call processing market, combined with the leading-edge **multi -lingual** speech technologies from Lernout & Hauspie, makes this agreement an important strategic step towards a worldwide...

...leading product such as Antares means that users of interactive voice response systems, such as **telephone banking** and tele -ordering, will be provided with a more natural interface in the language of...

19950201

9/3,K/16 (Item 8 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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02591181 Supplier Number: 45238042 (USE FORMAT 7 FOR FULLTEXT)

LERNOUT & HAUSPEE OFFERS MULTI-LINGUAL SPEECH TECHNOLOGIES

Worldwide Telecom, v7, n1, pN/A

Jan, 1995

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 484

... leadership position of Dialogic in the international call processing market, combined with the leading-edge **multi -lingual** speech technologies from Lernout & Hauspie, makes this agreement an important , strategic step towards a worldwide...

...leading product such as Antares means that users of interactive voice response systems, such as **telephone banking** and tele -ordering, will be provided with a more natural interface in the language of...

19950101

9/3,K/17 (Item 9 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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02537152 Supplier Number: 45114090 (USE FORMAT 7 FOR FULLTEXT)

IBM's PHONE BANKING SOLUTION FOR HONG KONG & SHANGHAI CORPORATION

M2 Presswire, pN/A

Nov 3, 1994

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 246

... said Mr. Eric Lau, IBM Hong Kong's associate systems engineer.
'DirectTalk/2 features like **multiple language** support, enables the bank to introduce their. **phone banking** system with case in countries where requirements for local language support is of particular importance
...

19941103

9/3,K/18 (Item 10 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02494398 Supplier Number: 45008326 (USE FORMAT 7 FOR FULLTEXT)

Could Virtual Reality Interactive Replace GUIs 09/21/94

Newsbytes, pN/A

Sept 21, 1994

Language: English Record Type: Fulltext

Document Type: Newswire; General Trade

Word Count: 442

... like a movie.

TMI prepares its specialized presentation disks for use in electronic training, in **kiosks**, and for use as product marketing tools. It can prepare a presentation in a **foreign language** or in **multiple languages** and will help the client design the presentation.

The company says it has minimized the...

19940921

9/3,K/19 (Item 11 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02485601 Supplier Number: 44988983 (USE FORMAT 7 FOR FULLTEXT)

The MasterCard International/Cirrus global ATM network

CardFAX, pN/A

Sept 12, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 66

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

CLOUDS AHEAD: The MasterCard International/Cirrus global **ATM** network has rolled out a marketing program for airport ATMs. The Travelers Access program features illuminated signs in airports directing cardholders to Cirrus ATMs in **different languages**. Also, MasterCard will publish a directory listing airports with Cirrus ATMs. **Bank** of Montreal, Argentina-based Argencard and Taiwan-based ICBC are initial participants in the program.

19940912

9/3,K/20 (Item 12 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02469179 Supplier Number: 44946273 (USE FORMAT 7 FOR FULLTEXT)

Floppies For Use By PCs, Macs Simultaneously 08/26/94

Newsbytes, pN/A

August 26, 1994

Language: English Record Type: Fulltext

Document Type: Newswire; General Trade

Word Count: 483

... virtually any kind of machine."

Moon sees the technology as ideal for applications such as **multi** -

language kiosks in international airports or dissemination of information to a wide audience.

While Twin Media is...

19940826

9/3,K/21 (Item 13 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2000 The Gale Group. All rts. reserv.

02419940 Supplier Number: 44807679 (USE FORMAT 7 FOR FULLTEXT)

MULTIMEDIA EDUCATES SOUTH AFRICAN VOTERS

Screen Digest, pN/A

July, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 63

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Thirty interactive kiosks were circulated round over 70 public locations to provide information to voters in recent South...

...software to produce the program which gave video messages from 19 political parties in 11 different languages . Sponsorship for project came from European Union and UNESCO.

19940701

9/3,K/22 (Item 14 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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02079186 Supplier Number: 43823974 (USE FORMAT 7 FOR FULLTEXT)

KAPITI EXPANDS ELEMENTS OF EQUATION PRODUCT

Computergram International, n2163, pN/A

May 7, 1993

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 153

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...on-screen or in report form, for quality management purposes; it incorporates a real-time automatic teller machine gateway to provide on-line validation and updates of such transactions as cash withdrawals, and...

...has a fund management capability, which can map onto clearing rules worldwide; and it has multi -lingual capabilities, such as being able to generate multi -lingual customer reports; the company gave no prices for it.

19930507

9/3,K/23 (Item 15 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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01969455 Supplier Number: 43508049 (USE FORMAT 7 FOR FULLTEXT)

TRAFFIC MANAGEMENT: GEORGIA DOT MOVES ON ATMS FOR OLYMPICS, BUT SKIRTS CUTTING EDGE

Inside IVHS, v2, n24, pN/A
Dec 7, 1992

Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 865

... doing anything in the automobile," Riddle says.
The agency has considered transmitting data to information kiosks . A document it published last spring, before releasing its request for proposals (RFP) for the...

...the consultant will "describe the design, construction and operation of a state-of-the-art multi -lingual Advanced Traveler Information System."

"We did talk about putting kiosks in big office buildings and shopping centers for traffic information," Riddle says. Now, however, the

19921207

9/3,K/24 (Item 16 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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01856258 Supplier Number: 43183087 (USE FORMAT 7 FOR FULLTEXT)
Citicorp Selects Empress Software Inc. To Develop Foreign Language Support for ATMs.

Bank Automation News, v4, n15, pN/A
July 29, 1992
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 120

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
Greenbelt, Md.-based Empress Software Inc. is going to help develop foreign language support for its Automation Teller Machine (ATM) screens worldwide. The Empress database is being used to store pre-translated ATM words...
19920729

9/3,K/25 (Item 17 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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01649263 Supplier Number: 42574803 (USE FORMAT 7 FOR FULLTEXT)
Macau: Bank Pioneers Online ATMs With CSSL Software 12/04/91
Newsbytes, pN/A
Dec 4, 1991
Language: English Record Type: Fulltext
Document Type: Newswire; General Trade
Word Count: 364

The bank is the first in Macau to link ATMs directly to the Equation international banking system using Kapiti's new Equation/ATM gateway. The ATMs will offer a multi -currency, multi -lingual service with the unique ability to print immediate updates to customer's passbooks.
"CSSL has...

19911204

9/3,K/26 (Item 18 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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01615008 Supplier Number: 42470221 (USE FORMAT 7 FOR FULLTEXT)
PHONES OF TOMORROW: SENDING E-MAIL FROM A PUBLIC PAY PHONE
Data Channels, v18, n22, pN/A
Oct 28, 1991
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Newsletter; Trade
Word Count: 331

... and text. Both the screens and function keys work in the same manner as an **automated teller machine**. There are also **foreign language** screens that provide dialing instructions in French, Spanish and German.

The phone also provides speed...

19911028

9/3,K/27 (Item 19 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01600743 Supplier Number: 42423177 (USE FORMAT 7 FOR FULLTEXT)
PAY PHONE OF TOMORROW: AT&T PUBLIC PHONE 2000 AS "PORTABLE OFFICE"
EDGE, on & about AT&T, v6, n167, pN/A
Oct 7, 1991
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 579

... graphics and text.

Both the screens and functions keys work in the same manner as **automated teller machines**, making the phone easy to operate. A special feature, **foreign language** screens, provides dialing instructions in French, Spanish and German.

The first information service to be...

19911007

9/3,K/28 (Item 20 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01598746 Supplier Number: 42415107 (USE FORMAT 7 FOR FULLTEXT)
AT&T Announces New Packet Switch, Pay Phone 10/02/91
Newsbytes, pN/A
Oct 2, 1991
Language: English Record Type: Fulltext
Document Type: Newswire; General Trade
Word Count: 155

... plug for laptop PCs or fax machines as well as a keyboard like those on **automated teller machines**, through which customers could get electronic mail or link to other dial-up services through their home or offices. The phones, which also offer **foreign language** services, are already being used at the Dallas/Fort Worth International Airport.

(Dana Blankenhorn/19911002...

19911002

9/3,K/29 (Item 21 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01526849 Supplier Number: 42192463 (USE FORMAT 7 FOR FULLTEXT)
VISA AND TOSHIBA TEST SUPER SMART CARD IN TOKYO
Card News, v6, n11, p6
July 1, 1991
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 704

... on the card, such as a rental car account number, and a PIN for an
automated teller machine. It has a clock, a calendar, a note pad, and
the ability to do currency conversion. It also can be programmed in 4
different languages.

(Peter Fallon, Toshiba America Information Systems, 214/404-1790).

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19910701

9/3,K/30 (Item 22 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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01470527 Supplier Number: 42016120 (USE FORMAT 7 FOR FULLTEXT)
**LERNOUT & HAUSPIE TAKES MULTILINGUAL SPEECH RECOGNITION TECHNOLOGY TO THE
US**
Computergram International, n1656, pN/A
April 19, 1991
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 239

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...products are designed to enable computers and machines to understand and
produce human speech in **different languages**. Its flagship product, just
launched in the US, is a **multi-lingual** speech board for personal
computers. And, according to the company, the 901PIM-C25 personal computer
...

...board and speech processing modules, algorithms, applications
development software and bundled systems - are used in **telephone banking**
, mail order response, and voice mail applications. Lernout & Hauspie aims
to expand geographically via joint...

19910419

9/3,K/31 (Item 23 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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01463733 Supplier Number: 41995292 (USE FORMAT 7 FOR FULLTEXT)
**SPEECH PROCESSING: MULTI-LINGUAL SPEECH MODULES NOW AVAILABLE TO U.S.
MANUFACTURERS FOR INTEGRATED VOICE REMOTE CONTROL, RESPONSE**
EDGE: Work-Group Computing Report, v2, n46, pN/A
April 8, 1991
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 848

... control or other speech-based capabilities into their products.

The L&H products -- including its **multi** -function, **multi** -lingual voice processing PC board and voice processing modules, algorithms, applications generation software and packaged systems - currently are used in Europe in **telephone banking** , mail order response, voice mail and other applications in which human speech reponse, voice mail...
19910408

9/3,K/32 (Item 24 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2000 The Gale Group. All rts. reserv.

01463147 Supplier Number: 41992816 (USE FORMAT 7 FOR FULLTEXT)
VOICE PROCESSING: EUROPEAN TECHNOLOGY COMPANY ESTABLISHES U.S. HQ LERNOUT & HAUSPIE SPEECHPRODUCTS N.V.
EDGE, on & about AT&T, v6, n141, pN/A
April 8, 1991
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 369

... incorporating voice processing technology more quickly and cost-effectively.

The L&H products -- including its **multi** -function, **multi** -lingual PC board and voice processing modules, algorithms, applications generation software and packaged systems -- currently are used in Europe in **telephone banking** , mail order response, voice mail and other applications in which human speech is the input...
19910408

9/3,K/33 (Item 1 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 2000 Bell & Howell. All rts. reserv.

02963406 SUPPLIER NUMBER: 96332626 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Art and diplomacy in Ottoman Constantinople
Mansel, Philip
History Today (GHIS), v46 n8, p43-49
Aug 1996
ISSN: 0018-2753 JOURNAL CODE: GHIS
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 4355 LENGTH: Long (31+ col inches)

1996

TEXT:

... in Poland.

The meetings of ambassadors and Grand Viziers, in the Porte or a private **kiosk** , appeared to be a collision between two worlds: they wore different costumes, spoke **different languages** and followed different religions. In reality, through their respective interpreters they spoke a common language...

9/3,K/34 (Item 2 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 2000 Bell & Howell. All rts. reserv.

02728681 SUPPLIER NUMBER: 96097901 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Albania in the twilight zone: The perseritje model and its impact on small

business

Dana, Leo Paul

Journal of Small Business Management (JSB), v34 n1, p64-70

Jan 1996

ISSN: 0047-2778

JOURNAL CODE: JSB

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3521

LENGTH: Long (31+ col inches)

1996

TEXT:

... per month). American music is no longer prohibited.

Whereas Russian and Chinese were formerly the **second languages** in Albania, many Albanians have learned Italian on television, and English will doubtlessly become popular...

...a statue of Stalin used to stand, there is now Pink Floyd graffiti on a **kiosk** selling imported cigarettes. A package of Marlboros sells for 150 leks (compared to 15 or...

9/3,K/35 (Item 3 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

(c) 2000 Bell & Howell. All rts. reserv.

02687284

SUPPLIER NUMBER: 96056504 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Atlanta's transit system "trains" for 1996 Olympics

Hudson, Kari

American City & County (GACY), v111 n1, p30, 34+

Jan 1996

ISSN: 0149-337X

JOURNAL CODE: GACY

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2752

LENGTH: Long (31+ col inches)

1996

TEXT:

... are expected during the Games.

Visitors will be able to input areas of interest into **kiosk** computers, which will be able to handle several **different languages**, and view travel and public transportation information according to location from the digital map. They...

9/3,K/36 (Item 4 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

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02182441

(USE FORMAT 7 OR 9 FOR FULLTEXT)

Polish writers and the transition from socialist 'unreality' to capitalist 'reality': 1980-92

Tighe, Carl

Journal of European Studies (PEUS), v24 n95 (Pt. 3), p205-241

Sep 1994

ISSN: 0047-2441

JOURNAL CODE: PEUS

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 16905

LENGTH: Long (31+ col inches)

1994

TEXT:

... the ownership of the RSW specialist publishing houses, namely: Interpress (the Party's outlet for **foreign language** publication about Poland); KAW, (Krajowa Agencja Wydawnicza, National Publishing Agency) specializing in social and political...

...young adults, social and political science texts. By the end of 1991 the privatized Ruch **kiosks** were still the main distributors of newspapers and journals, and were still massively inefficient: they...

9/3,K/37 (Item 5 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 2000 Bell & Howell. All rts. reserv.

01957846 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Power to the people

Noack, David; Clapper, Anne; McCooey, Al
American City & County (GACY), v109 n6, p40-56, p.9
May 1994

ISSN: 0149-337X JOURNAL CODE: GACY

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4957 LENGTH: Long (31+ col inches)

1994

TEXT:

... city services.
Users can get directions to Carnegie Hall or get a marriage license. The **kiosks** are **multi-lingual**, offer text, video, graphics and can be accessed 24 hours a day.
Recently, Texas installed...

9/3,K/38 (Item 1 from file: 813)

DIALOG(R)File 813:PR Newswire
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0852371

SF002

THE DOORS OPEN AT THE NEW YORK FLAGSHIP ORIGINAL LEVI'S(R) STORE; STORE DEBUTS INTERACTIVE KIOSK SYSTEM

DATE: August 21, 1995 07:30 EDT WORD COUNT: 223

...Street Store will be the first to unveil the Original Levi's(R) Store Interactive **Kiosk**, a **multi lingual** system of eight separate, interactive **kiosks** offering Levi's(R) product and fit information, international store locations and historical facts presented within the context of Levi's(R) brand advertising campaigns. The **kiosks** are accessible in English, German, French and Spanish.

An entire section of the store will...

9/3,K/39 (Item 2 from file: 813)

DIALOG(R)File 813:PR Newswire
(c) 1999 PR Newswire Association Inc. All rts. reserv.

0838616

DC007

THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS IN

HOTELS; AVAILABLE AND ECONOMICALLY VIABLE TODAY

DATE: July 10, 1995 10:19 EDT WORD COUNT: 522

...network (LAN) for employee training on PCs, self-guided store and product information tours on **kiosks**, and entertainment and business services on TVs. Each user's selections and choices make the...

...time. Content is virtually unlimited with delivery response time of less than two seconds in **multiple languages**.

Interactive multimedia applications on lobby **kiosks** enable hotel guests to check in or learn about hotel activities and services. Guests can...

9/3,K/40 (Item 3 from file: 813)

DIALOG(R)File 813:PR Newswire

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0838591

DC008

THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS IN EDUCATION; AVAILABLE AND ECONOMICALLY VIABLE TODAY

DATE: July 10, 1995 10:00 EDT WORD COUNT: 519

...network (LAN) for employee training on PCs, self-guided store and product information tours on **kiosks**, and entertainment and business services on TVs. Each user's selections and choices make the...

...time. Content is virtually unlimited with delivery response time of less than two seconds in **multiple languages**.

In education, ThunderWave's networked multimedia system supports programs such as "The Shakespeare Project," an...

9/3,K/41 (Item 4 from file: 813)

DIALOG(R)File 813:PR Newswire

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0835190

DC031

THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS IN CORPORATE TRAINING; AVAILABLE AND ECONOMICALLY VIABLE TODAY

DATE: June 26, 1995 13:55 EDT WORD COUNT: 478

...network (LAN) for employee training on PCs, self-guided store and product information tours on **kiosks**, and entertainment and business services on TVs. Each user's selections and choices make the...

...time. Content is virtually unlimited with delivery response time of less than two seconds in **multiple languages**.

Investment in employee education and training is on the rise as companies fight to stay...

9/3,K/42 (Item 5 from file: 813)

DIALOG(R)File 813:PR Newswire

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0835188

DC030

**THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS IN
RETAIL: AVAILABLE AND ECONOMICALLY VIABLE TODAY**

DATE: June 26, 1995 13:53 EDT WORD COUNT: 519

...network (LAN) for employee training on PCs, self-guided
store and product information tours on **kiosks** , and entertainment and
business services on TVs. Each user's selections and choices make the...

...time. Content is virtually
unlimited with delivery response time of less than two seconds in
multiple languages .

Interactive networked multimedia systems offer nearly unlimited
applications in retail to inform, assist and reward...

9/3,K/43 (Item 6 from file: 813)

DIALOG(R)File 813:PR Newswire

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0835186

DC029

**THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS IN
HEALTH CARE: AVAILABLE AND ECONOMICALLY VIABLE TODAY**

DATE: June 26, 1995 13:49 EDT WORD COUNT: 527

...network (LAN) for employee training on PCs, self-guided
store and product information tours on **kiosks** , and entertainment and
business services on TVs. Each user's selections and choices make the...

...time. Content is virtually
unlimited with delivery response time of less than two seconds in
multiple languages .

In the changing world of health care, ThunderWave is capable today
of creating an interactive...

...Internet, check out and more. Employee education can be delivered right
to desktop PCs in **multiple languages** . As coursework continues and is
completed, reports are automatically generated for accreditation in
employee records...

9/3,K/44 (Item 7 from file: 813)

DIALOG(R)File 813:PR Newswire

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0830557

DC005

**THUNDERWAVE BRINGS 'FUTURISTIC' INTERACTIVE MULTIMEDIA NETWORKS TO USERS:
AVAILABLE AND ECONOMICALLY VIABLE TODAY**

DATE: June 12, 1995 12:20 EDT WORD COUNT: 359

...network (LAN) for employee training on PCs, self-guided store
and product information tours on **kiosks** , and entertainment and business
services on TVs. Each user's selections and choices make the...

...time. Content is virtually unlimited with

delivery response time of less than two seconds in **multiple languages** .

ThunderWave's founders were the technical developers of the US Holocaust Memorial Museum in Washington...

9/3,K/45 (Item 8 from file: 813)
DIALOG(R)File 813:PR Newswire
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0710605 FL002
BANKATLANTIC TO INSTALL ATMs IN SELECTED WAL-MART STORES AND SAM'S CLUBS IN FLORIDA

DATE: May 31, 1994 15:06 EDT WORD COUNT: 275

...shopping
needs."

BankAtlantic ATMs in Wal-Mart Stores and Sam's Clubs will accept BankAtlantic **ATM** cards, as well as **bank** cards and Visa, MasterCard and American Express cards that are compatible with national and international Cirrus, Plus and Honor **ATM** systems. In addition, BankAtlantic card holders may use the Wal-Mart Stores and Sam's Club ATMs without incurring transaction fees. BankAtlantic **ATM** screens are **multi lingual** , providing service in English, French and Spanish. A German language option will be added in...

9/3,K/46 (Item 9 from file: 813)
DIALOG(R)File 813:PR Newswire
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0710065 AT002
S&A'S NINTH ANNUAL SURVEY OF PROPRIETARY EFT NETWORKS FINDS INCREASES IN MOST MEASURES OF EFT ACTIVITY

DATE: May 27, 1994 11:58 EDT WORD COUNT: 1,599

...attainable given current market
conditions.

S. Kere Lewis, Executive Vice President of the Atlanta-based **financial** services consulting firm, said, "Greater numbers of consumers are becoming increasingly comfortable with ATMs as evidenced by the continued growth in most measures of **EFT** activity. Significant potential, however, for additional growth exists with POS as the driver. Card penetration...

...increased less than 5% in the last five years." As the rate of growth in **ATM** activity has diminished in recent years, many institutions are developing alternative strategies to raise customer...
...as complete information centers and implementing a myriad of enhancements accordingly. A wide range of **ATM** add-ons are planned for 1994 by many of the survey respondents, including check cashing, statement printing, postage stamp and coin dispensing, **multi - lingual** customer processing and check ordering. In fact, 86% of respondents indicated that some form of **ATM** upgrade or complete replacement of **ATM** terminals is anticipated in 1994.

The 1994 S&A survey results are based on 105...

9/3,K/47 (Item 10 from file: 813)

DIALOG(R)File 813:PR Newswire

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0698366

SF013

INTERACTIVE MULTIMEDIA: A NEW TOOL TO REACH INVESTORS; 'INTERACTIVE
INVESTING WITH VENTURE ENHANCEMENT RESOURCE ASSOCIATES'

DATE: April 25, 1994

15:07 EDT

WORD COUNT: 612

...ways to utilize the same
information, for example, in interactive presentations, annual reports,
"road shows," kiosks or sales tools -- and in several different
languages , if desired. A single effort to develop and produce
interactive multimedia can yield many diverse...

9/3,K/48 (Item 11 from file: 813)

DIALOG(R)File 813:PR Newswire

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0460442

NY094

IBM ANNOUNCES THE ULTIMEDIA TOUCH ACTIVITY CENTER

DATE: March 30, 1992

17:07 EST

WORD COUNT: 573

...a number of
tasks in a variety of situations. For example, retailers can use these
kiosks to merchandise and sell products, including the ability to accept
credit cards. The Touch Activity...

...also be used to provide
information, directions, and allow voice and written messaging, all in
multiple languages .

The recent "Corot to Monet" exhibition at Atlanta's High Museum of
Art featured IBM...

9/3,K/49 (Item 12 from file: 813)

DIALOG(R)File 813:PR Newswire

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0403697

PH016

NEW AT&T PAY PHONE OF TOMORROW ANNOUNCED TODAY

DATE: October 2, 1991

13:06 EDT

WORD COUNT: 2,092

...graphics and text. Both the screens and functions keys work in the same
manner as automated teller machines , making the phone easy to
operate.

A special feature, foreign language screens, provides dialing
instructions in French, Spanish and German.

The first information service to be...

9/3,K/50 (Item 1 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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04677060 Supplier Number: 46883826

Banking machines branch out.

Richmond Times-Dispatch (VA), pD16

Nov 11, 1996

Language: English Record Type: Abstract

Document Type: Newspaper; Trade

ABSTRACT:

More and more banks in Richmond, VA, are adding features to their **automated teller machines** (ATMs), such as payment of utility bills and dispensing stamps or tickets to a baseball...

...representatives. The new ATMs can print out account statements, accept payments on loans, transact in **more than one language** and provide all kinds of information. The banks' goals in providing more services to customers...

19961111

9/3,K/51 (Item 2 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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04311015 Supplier Number: 46319395

New York Thrift's ATMs User Friendly in 6 Languages

American Banker, p27

April 22, 1996

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Trade

ABSTRACT:

Greater New York Savings Bank, a thrift worth \$2.6 billion, installs 29 **automated teller machines** with Russian, English, Spanish, Creole, Portuguese and Yiddish instructions, to cater to its varied customer...

...institution also employed customer service representatives fluent in the neighborhood language and printed brochures in **various languages**.

19960422

9/3,K/52 (Item 3 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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03915100 Supplier Number: 45650547 (USE FORMAT 7 FOR FULLTEXT)

CD-ROMS, ISDN, THEN TV

Multichannel News, v0, n0, p33

July 3, 1995

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 653

... service based on full-motion video.

Other interactive applications on hand: interactive training, interactive shopping **kiosks**, medical and **foreign language** services and video-embedded map programs.

Developers present at the briefing called OMO a serious...

19950703

9/3,K/53 (Item 4 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)
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03862244 Supplier Number: 45541574 (USE FORMAT 7 FOR FULLTEXT)
Tomorrow's merchants make shopping easier, more entertaining
Discount Store News, v0, n0, p43
May 15, 1995
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1814

... millennium will be more entertaining to shop in with a wider use of high-tech **kiosks**, store-within-a-store programs, try-me areas and cross-merchandising displays. Also stores will...

...themed-based merchandisers, especially in the area of licensing and seasonal programs, category displays and **multi -lingual** packaging and signing for greater appeal across wide demographic areas.

The early years of the...

19950515

9/3,K/54 (Item 5 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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03844215 Supplier Number: 45503834 (USE FORMAT 7 FOR FULLTEXT)
ISLANDS IN THE STREAM: In selling financial services to largely untapped ethnic and other minority markets, cultural nuances are critical
Forecast, p39
May, 1995
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 4222

... checking accounts, ATM's and how to establish credit. For lunar New Year's, the **bank** distributed a calendar in **various Asian languages**, which also contained a prepaid AT&T telephone calling card. Since the holiday is a time of gift-giving, the **bank** offered six free months of checking. And for the newcomers, says Chin, the literature on...

19950501

9/3,K/55 (Item 6 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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03696164 Supplier Number: 45231203 (USE FORMAT 7 FOR FULLTEXT)
Taking the hassle out of airline travel
Interavia Business & Technology, p31
Jan, 1995
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1528

... Tulsa to a local front-end processor which automatically updates the display.

Self-service information **kiosks** of the sort found in city centres could be the next step. These could automatically provide answers in a **variety of languages** to queries about future flights, gates, duty free allowances, immigration formalities and so on, though...

19950101

9/3,K/56 (Item 7 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2000 The Gale Group. All rts. reserv.

03434787 Supplier Number: 44785203 (USE FORMAT 7 FOR FULLTEXT)
CD vending lifts off
Music Week, p6
June 25, 1994
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 241

... boxed sets have so far been available through the 24 kiosks at Heathrow.

The Galleria **kiosks** sell CDs alongside a range of products. A touch-sensitive screen allows orders by credit card for dispatch to 28 different countries. The system, which provides information in six **different languages**, last week won two British Interactive Multimedia Association awards.

News of the Galleria expansion coincides...

19940625

9/3,K/57 (Item 8 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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03391770 Supplier Number: 44712123 (USE FORMAT 7 FOR FULLTEXT)
Building Multimedia Applications Gets Easier
CommunicationsWeek, p9
May 30, 1994
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 557

... users work with analog and digital video, animation, graphics and audio for computer-based training, **kiosks** and other networked applications. The software lets users work in a **variety** of programming **languages** including Visual Basic, Access, C or C+ +, or any other environment supporting dynamic link libraries...

19940530

9/3,K/58 (Item 9 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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03114494 Supplier Number: 44246301 (USE FORMAT 7 FOR FULLTEXT)
Video for Windows 1.1 aimed at VARs
Computer Reseller News, p28
Nov 22, 1993
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 412

... the ability to associate multiple audio streams with a video clip. For example, a promotional **kiosk** video could include audio tracks in several **different languages**.

Other features that are included in the product are installable renderers, which allow developers to...

19931122

9/3,K/59 (Item 10 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)
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02687922 Supplier Number: 43587720 (USE FORMAT 7 FOR FULLTEXT)

Interactive Multimedia: PRESSING ALL THE RIGHT BUTTONS

InformationWeek, p42

Jan 18, 1993

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Tabloid; General Trade

Word Count: 1264

... multimedia programs housed in free-standing displays efficiently deliver a tailored sales pitch or product. **Kiosks** are portable, allowing them to go where the customers are, be it a **bank** lobby, a grocery store, or a company cafeteria. The software is interactive, so information can be customized for such individual needs as **foreign languages**. And with **banking's automated teller machines (ATM)**, which work in a similar fashion, now a standard feature of the American landscape, the time needed to acquaint users with the **kiosk** concept is virtually nil. **Kiosk** software also records every transaction, helping companies build customer databases.

Cheap And Easy

Like an...

19930118

9/3,K/60 (Item 11 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)
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02665428 Supplier Number: 43552480

Speech recognition no longer just a lot of talk

Electronic Business, p61

Jan, 1993

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Trade

ABSTRACT:

...enable users to dictate letters to their PCs and workstations, to translate English into a **foreign language**, and to accept verbal commands for applications' control. Wen Technology (Elmsford, NY), has developed a notebook computer that employs voice commands. NCR and AT&T are developing **automated teller machines** to use band cards with voice passwords on built-in memory chips. Other areas of...

19930101

9/3,K/61 (Item 12 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2000 The Gale Group. All rts. reserv.

02433292 Supplier Number: 43204940 (USE FORMAT 7 FOR FULLTEXT)

Times Square

Travel Agent, v0, n0, p38

August 3, 1992

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 91

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...newest stars in Times Square are really packing them in. Two giant steamer trunk-shaped **kiosks** , stuffed with maps, brochures and other visitor information have been set up in the theater...

...daily from 10:30 a.m. to 7 p.m. Information counselors, who speak several **foreign languages** , are present to help visitors.

19920803

9/3,K/62 (Item 13 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2000 The Gale Group. All rts. reserv.

02402229 Supplier Number: 43159706

Global ATMs: Local Software Company Speaks the Language

Washington Business Journal, p16

July 19, 1992

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Trade

ABSTRACT:

Empress Software (Greenbelt, MD) has been retained by Citicorp to translate **automatic teller machine** (ATM) prompts into **various languages** for use worldwide. The software company has a database and technology that can translate words...

19920719

9/3,K/63 (Item 14 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2000 The Gale Group. All rts. reserv.

01954423 Supplier Number: 42498191 (USE FORMAT 7 FOR FULLTEXT)

AT&T Announces 'Pay Phone Of Tomorrow'

Hotel & Motel Management, pB39

Nov 4, 1991

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Tabloid; Trade

Word Count: 452

... resolution graphics and text. The screen and function keys work in the same manner as **automated teller machines** , making the phone easy to operate. A special feature, the **foreign -language** screen provides dialing instructions in French, Spanish and German.

The first information service to be...

19911104

9/3,K/64 (Item 15 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2000 The Gale Group. All rts. reserv.

01915358 Supplier Number: 42440123 (USE FORMAT 7 FOR FULLTEXT)

PAY PHONE POWER

InformationWeek, p54

Oct 14, 1991

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Tabloid; General Trade

Word Count: 278

... high-resolution graphics and text. The screen and keys operate in a similar fashion to **automated teller machines** . In addition, the screen provides **foreign -language** dialing instructions, which are displayed in French, Spanish, and German.

The first on-line information...

19911014

9/3,K/65 (Item 16 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2000 The Gale Group. All rts. reserv.

01872860 Supplier Number: 42376998

ACI Language Classes Broaden Skills

Omaha World Herald (NE), pM1

Sept 22, 1991

Language: English Record Type: Abstract

Document Type: Newspaper; Trade

ABSTRACT:

Applied Communications (Omaha, NE) is offering **foreign language** classes for its workers in Omaha, NE. The firm is offering Spanish language classes at...

...are being offered at the firm's headquarters in Omaha. Applied Communications designs software for **automatic teller machines** . Applied Communications has customers in 39 countries who speak 29 **different languages** . A senior account manager at Applied Communications, Carla Hughes, found herself unable to tell a...

19910922

9/3,K/66 (Item 17 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2000 The Gale Group. All rts. reserv.

01550816 Supplier Number: 41896982 (USE FORMAT 7 FOR FULLTEXT)

THE CHANGING ROLE OF THE CFO

Chain Store Age Executive with Shopping Center Age, p130

March, 1991

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 681

... relations.

There are many languages that today's cfo's must master. Some are literally **foreign tongues** that must be mastered to compete in the global marketplace. But perhaps the most important...

...is the basic vocabulary and nuances of our vital new technological tools--from EDI to **EFT** .

The cfo needn't be involved in the physical management of inventory, but he or...

19910301

9/3,K/67 (Item 1 from file: 160)

DIALOG(R)File 160:Gale Group PROMT(R)

(c) 1999 The Gale Group. All rts. reserv.

02070165

Credit cards do more than pay foreign travel bills

Northeast International Business April, 1988 p. 11,12
ISSN: 1040-9041

Publication Year: 1988

... companies each year for entertainment and travel. Therefore, domestic services becoming increasingly available worldwide include **automated teller machines**, various kinds of low-cost or free insurance when the card is used to pay for travel arrangements, private club memberships, special lounges at airports, medical and legal help, **foreign language** translation by phone, bail, secretarial services, and extra points for many frequent-traveler programs. Check...

9/3,K/68 (Item 2 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
(c) 1999 The Gale Group. All rts. reserv.

01549571

APPLIED COMMUNICATIONS, INC ANNOUNCES RELEASE 4 0 OF BASE24-atm (R).
NEWS RELEASE November 17, 1986 p. 11

Publication Year: 1986

Applied Communications, Inc. today announced Release 4.0 of their premier BASE24 (R) product. BASE24-atm Release 4.0 will be tested at the beta site, First Bank System of St. Paul, Minnesota. General availability for the product is scheduled for early 1987. Since its introduction in 1982, BASE24-atm has been installed in over 150 institutions worldwide, and its success can be attributed to...

... transactions have been added to offer the convenience of minimizing the transaction selection sequence and **Multiple Language** Support allows the BASE24 customer to support up to two individual languages at each **automated teller machine**. Also included is support for institutions using the International Standard Organization (ISO) format.

...

9/3,K/69 (Item 3 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
(c) 1999 The Gale Group. All rts. reserv.

01490556

MANIFEX INTRODUCES PUBLIC ACCESS ANSWER BOX (TM).
NEWS RELEASE May 6, 1986 p. 11

Publication Year: 1986

... or touch-sensitive screen, is presented on a video screen housed in a free-standing **kiosk** or mounted in a wall. The Manifex product is customized to suit each operator's...

... flexibility. An Answer Box system may consist of from a handful to hundreds of **kiosks**, incorporating one or a number of options, including printers and videodiscs. Answer Box permits the display of information in **more than one language**. A "You Are Here" feature helps users orient themselves in new and unfamiliar locations.

...

9/3,K/70 (Item 4 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
(c) 1999 The Gale Group. All rts. reserv.

01266876

New Pay Phones That Read Cards Baffle Callers.

WALL STREET JOURNAL 3 STAR, EASTERN (PRINCETON, NJ) EDITION October 21,
1985 p. 271

Publication Year: 1985

... callers are using the machines less often than the telephone companies had expected. Unlike most **automated -teller machines** used by banks, the phone machines require the customer to position the card's magnetic...

... work, since the instructions are unnecessarily comprehensive, listing numbers to call for assistance in a **foreign language**, describing the various calls that can be made from the phone, providing emergency numbers and...

9/3,K/71 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

08467332 SUPPLIER NUMBER: 17907739 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Liability issues, social needs dictate design. (transportation planners) (Public Transportation)

American City & County, v111, n1, p38(1)
Jan, 1996

ISSN: 0149-337X LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1029 LINE COUNT: 00088

... comply with government funding requirements.

Visitors will be able to input areas of interest into **kiosk** computers, which will be able to handle several **different languages**, and view travel and public transportation information according to location from the digital map. They...

19960100

9/3,K/72 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

08279157 SUPPLIER NUMBER: 17532434 (USE FORMAT 7 OR 9 FOR FULL TEXT)

NATPE International. (National Association of Television Program Executives annual conference and exhibition in Las Vegas, Nevada) (Brief Article)

Freeman, Michael

MEDIAWEEK, v5, n42, p13(1)

Nov 6, 1995

DOCUMENT TYPE: Brief Article ISSN: 1055-176X LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 279 LINE COUNT: 00027

TEXT:

...bar-coded "swipe" badges allowing attendees to access program and exhibitor information; telephones at selected **kiosks** will offer translation of 180 **different languages**; a soon-to-be-launched online NATPE Web site will offer conference information; and there...

19951106

9/3,K/73 (Item 3 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

08193353 SUPPLIER NUMBER: 17525791 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Heat, home centers dominate 50th National Hardware Show.
Cory, James M.; Shuster, Laurie; Lambert, Cheryl Ann; Kelly, Joseph M.
Chilton's Hardware Age, v232, n9, p12(3)
Sep, 1995
ISSN: 8755-254X LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1531 LINE COUNT: 00126

... the dominance of large chains as never before, with vendors
invirtually all product categories introducing **multi -lingual** and
"application-specific" packaging, self-sell merchandisers and interactive
kiosks using both video and CD-Rom. The point, as a HomeBase buyer
explained, was the...

19950900

9/3,K/74 (Item 4 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

08019163 SUPPLIER NUMBER: 17334954 (USE FORMAT 7 OR 9 FOR FULL TEXT)
CD-ROMs, ISDN, then TV. (Oracle Corp. introduces Oracle Media Objects)
Ellis, Leslie
Multichannel News, v16, n27, p33(2)
July 3, 1995
ISSN: 0276-8593 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 684 LINE COUNT: 00060

... service based on full-motion video.
Other interactive applications on hand: interactive training,
interactive shopping **kiosks**, medical and **foreign language** services
and video-embedded map programs.
Developers present at the briefing called OMO a serious...

19950703

9/3,K/75 (Item 5 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

07882603 SUPPLIER NUMBER: 16837845 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Tomorrow's merchants make shopping easier, more entertaining. (Special
Report: Reinventing the Discount Store: Merchandising)**
Liebeck, Laura
Discount Store News, v34, n10, p43(2)
May 15, 1995
ISSN: 0012-3587 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1849 LINE COUNT: 00164

...ABSTRACT: appealing to and easier to use for the customer. Future
technology may include high-tech **kiosks**, electronic shopping and debit
card usage. Additional changes will include **multi -lingual** packaging and

cross-merchandising displays.

... millennium will be more entertaining to shop in with a wider use of high-tech **kiosks**, store-within-a-store programs, try-me areas and cross-merchandising displays. Also, stores will...

...themed-based merchandisers, especially in the area of licensing and seasonal programs, category displays and **multi -lingual** packaging and signing for greater appeal across wide demographic areas.

The early years of the...

19950515

9/3,K/76 (Item 6 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

07747429 SUPPLIER NUMBER: 16655961 (USE FORMAT 7 OR 9 FOR FULL TEXT)
ODGEN AWARDED 11-YEAR LEASE FOR 107TH FLOOR OBSERVATION DECK AT WORLD TRADE CENTER.

Business Wire, p03101057

March 10, 1995

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 360 LINE COUNT: 00030

... will take visitors on an aerial sightseeing tour of New York City and environs; interactive, **multi -lingual kiosks** at various viewing points; a nightly rooftop light show that will be visible for miles...

19950310

9/3,K/77 (Item 7 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

07499818 SUPPLIER NUMBER: 15693921 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Two's company for Virgin Atlantic. (Virgin Atlantic Airways Ltd.)

Cotter, Marion

EuroBusiness, v2, n4, p107(2)

July-August, 1994

ISSN: 0953-0711 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 1833 LINE COUNT: 00140

... The project is a venture between Channel i, a British company responsible for developing the **kiosks**, and London Underground. Initially, **kiosks** will be installed in 35 of London's main underground stations. The service is available in six **different languages** and is free of charge. Although the concept has not yet been developed outside America...

19940700

9/3,K/78 (Item 8 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

07306788 SUPPLIER NUMBER: 16145962 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Birthdays are big business for American Greetings. (American Greetings Corp.) (includes related article)

Chain Drug Review, v16, n13, p149(1)
June 20, 1994

ISSN: 0164-9914 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1150 LINE COUNT: 00096

... for the first time, the fun of both giving and receiving personalized greeting cards."

CreataCard **kiosks** allow people to make their own cards by combining elements from roughly 1,600 everyday, seasonal and **foreign language** designs. Using interactive touch screen technology, purchasers can add names and dates, choose among special...

19940620

9/3,K/79 (Item 9 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

07224770 SUPPLIER NUMBER: 15271712 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Designing information technology for people. (The Information Highway)
Etherington, William A.
Business Quarterly, v58, n3, p103(4)
Spring, 1994
ISSN: 0007-6996 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2793 LINE COUNT: 00216

... and the successful impact of human-centric technology is Barcelona's Expo 1992. About 200 **kiosks** were set up around the Expo grounds. At the heart of each was a computer terminal -- but it was not called that. Children and adults speaking a dozen **different languages** actually waited in line to work with programs that were people-friendly. No matter what...

...users had, the computers and their software never let them down. You could use the **kiosks** : to make dinner reservations, to explore what various restaurants looked like, to book a time...

19940322

9/3,K/80 (Item 10 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

07193053 SUPPLIER NUMBER: 15161224 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Telecommuting: an alternative to the freeways. (The Alternative Office: Portable & Home)
Murray, Mike
Los Angeles Business Journal, v16, n5, p26(2)
Feb 7, 1994
ISSN: 0194-2603 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1144 LINE COUNT: 00093

... Desk" and referral services including equipment, software, real estate, connectivity and other expert referral services; **Multi -media, multi -lingual information kiosks** with disaster relief, transportation alternative and telecommuting information; Telecommuting information, education and training assistance; Response...

19940207

9/3,K/81 (Item 11 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

07161384 SUPPLIER NUMBER: 14845371 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Deluxe Data introduces advanced ATM tools. (software for automated teller machines) (Management Strategies) (Brief Article)
American Banker, v159, n1, p15A(1)
Jan 3, 1994
DOCUMENT TYPE: Brief Article ISSN: 0002-7561 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 641 LINE COUNT: 00053

TEXT:

Milwaukee-based Deluxe Data Systems Inc. introduced a new line of **automated teller machine** software and service modules designed to support advanced self-service banking. The new components include stop payment functions and statement printing, as well as a check reordering feature and **multiple language** screens. Deluxe Data is also offering a module to handle noncash products such as stamps...

19940103

9/3,K/82 (Item 12 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

06812641 SUPPLIER NUMBER: 14473181 (USE FORMAT 7 OR 9 FOR FULL TEXT)
As good as our word. (Oregon's tourist industry adopts international symbol signs and languages) (Industry Overview)
Watson, Stu
Oregon Business, v16, n9, p83(3)
Sept, 1993
DOCUMENT TYPE: Industry Overview ISSN: 0279-8190 LANGUAGE:
ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 937 LINE COUNT: 00076

... International Airport.
Flying into Portland, foreigners land softly. The airport has brochures and interactive electronic **kiosks** in five **different languages**. Visitors can punch up info on lodging, cabs, whatever.
"I know foreign travelers feel very...

19930900

9/3,K/83 (Item 13 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

06810007 SUPPLIER NUMBER: 14820149 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Multimedia: swiftly, agencies are reaping the benefits with a blend of audio and visual.
Lindstrom, Robert
Government Computer News, v12, n24, p56(3)
Nov 8, 1993
ISSN: 0738-4300 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2071 LINE COUNT: 00171

... assist livestock producers in obtaining livestock-loss benefits information.
The Census Bureau plans to develop **kiosks** that will inform people

at neighborhood locations, in **multiple languages** , about the importance of the census and its confidential nature.

* The Interstate Job Bank of...

19931108

9/3,K/84 (Item 14 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

06396140 SUPPLIER NUMBER: 13392776 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Speech recognition no longer just a lot of talk; voice systems enter the mass market. (Computer Report)

Whiting, Rick

Electronic Business, v19, n1, p61(1)

Jan, 1993

ISSN: 0163-6197 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 599 LINE COUNT: 00049

... that allow users to dictate letters to their PCs and workstations, to translate English into **foreign language** text, and to control applications by issuing verbal commands. Wen Technology Corp. in Elmsford, NY, demonstrated a notebook computer at Fall Comdex that can use voice commands. **Automated teller machines** being developed by NCR Corp. and AT&T will use bank cards with voice passwords...

19930100

9/3,K/85 (Item 15 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

06213532 SUPPLIER NUMBER: 12849473 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Keeping in 'touch' with the Olympics. (use of International Business Machines Corp.'s Ultimedia Touch Activity Centers)

AVC Presentation Development & Delivery, v26, n8, p14(2)

August, 1992

ISSN: 1062-2683 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 718 LINE COUNT: 00060

... a number of tasks in a variety of situations. For example, retailers can use these **kiosks** to merchandise and sell products, including the ability to accept credit cards. The Touch Activity...

...also be used to provide information, directions, and allow voice and written messaging all in **multiple languages** . The recent "Corot to Monet" exhibition at Atlanta's High Museum of Art featured IBM...

19920800

9/3,K/86 (Item 16 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

06073162 SUPPLIER NUMBER: 12864541

MARTA is readying new foreign language kiosks. (Metropolitan Atlanta Rapid Transit Authority)

DeMarco, Edward

Atlanta Business Chronicle, v15, n11, p8A(1)

August 7, 1992

ISSN: 0164-8071

LANGUAGE: ENGLISH

RECORD TYPE: CITATION

MARTA is readying new foreign language kiosks. (Metropolitan Atlanta Rapid Transit Authority)

19920807

9/3,K/87 (Item 17 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

05594159 SUPPLIER NUMBER: 12139222

Banking firm tightens belt, makes technology prove itself. (Sanwa Bank California)

Bozman, Jean S.

Computerworld, v26, n18, p51(2)

May 4, 1992

ISSN: 0010-4841

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

...ABSTRACT: same time reducing costs. Among the projects the MIS department is working on are new **automated teller machine** screens with **multiple languages** and a new cash management system that runs on an IBM System/88 computer. Sanwa...

19920504

9/3,K/88 (Item 18 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

05592862 SUPPLIER NUMBER: 11715873 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Decade of the desktop: if Comdex visions for the '90s and beyond are realized, the personal computer's entire first decade is rendered embryonic. (Cover Story)

Stevens, Scot

Appliance, v48, n12, p36(3)

Dec, 1991

DOCUMENT TYPE: Cover Story

ISSN: 0003-6781

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 2440 LINE COUNT: 00202

... OEMs and suppliers. Teleconferencing and presentation applications are also a natural multimedia extension.

Multimedia-based **kiosks** are already in place at the Los Angeles International Airport, providing details in **different languages** on the wide variety of transportation choices available to travelers. These **kiosks** maximize ease-of-use with touch screen technology. Videos of transportation selections are also provided information to the **kiosk** system by editing video on a desktop computer and sending updated or new files over...

19911200

9/3,K/89 (Item 19 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

05444283 SUPPLIER NUMBER: 11197258 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Plugging into constituencies: as technology continues to advance, the ability of local government to communicate with its constituency does so also.

Thompson, Stephanie

American City & County, v106, n8, p67(4)

August, 1991

CODEN: ACCOD

ISSN: 0149-337X

LANGUAGE: ENGLISH

RECORD TYPE:

FULLTEXT

WORD COUNT: 1697

LINE COUNT: 00137

... the screen, and in many cases will allow its users to print out information.

The kiosks may be located in libraries, grocery stores, shopping malls or anywhere the public can reach them. (Interestingly enough, kiosks placed in elderly centers are rarely used. It seems the older generation is not interested in communicating through a machine.) And, 24-Hour City Halls can communicate in more than one language. In Phoenix, Ariz., for instance, the system incorporates both English and Spanish. Hawaii's state...

19910800

9/3,K/90 (Item 20 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

05417383 SUPPLIER NUMBER: 10967113 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Visa and Toshiba test super smart card in Tokyo. (with special telephones, Japanese use Visa's super smart card to book plane and train reservations)

Seidenberg, John P.; Taylor, Claire E.; Mseka, Ayo I.

Card News, v6, n13, p6(3)

July 1, 1991

ISSN: 0894-0797

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 728

LINE COUNT: 00054

... on the card, such as a rental car account number, and a PIN for an automated teller machine. It has a clock, a calendar, a note pad, and the ability to do currency conversion. It also can be programmed in 4 different languages.

19910701

9/3,K/91 (Item 21 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

05151767 SUPPLIER NUMBER: 10490149 (USE FORMAT 7 OR 9 FOR FULL TEXT)

The changing role of the CFO. (chief financial officer) (Finance)

Gilman, Alan L.

Chain Store Age Executive with Shopping Center Age, v67, n3, p130(1)

March, 1991

ISSN: 0193-1199

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 736

LINE COUNT: 00056

... relations.

There are many languages that today's cfo's must master. Some are literally foreign tongues that must be mastered to compete in the global marketplace. But perhaps the most important...

...is the basic vocabulary and nuances of our vital new technological tools
- from EDI to **EFT** .

The cfo needn't be involved in the physical management of inventory,
but he or...

19910300

9/3,K/92 (Item 22 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

05135609 SUPPLIER NUMBER: 10612955 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Speech processing: multi-lingual speech modules now available to U.S.
manufacturers for integrated voice remote control, response. (Lernout &
Hauspie Speechproducts NV's 901PIM-C25 voice processing board and voice
processing modules, algorithms, applications generation software and
packaged systems) (Product Announcement)**
EDGE, on & about AT&T, v6, n141, p10(1)
April 8, 1991
DOCUMENT TYPE: Product Announcement LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 899 LINE COUNT: 00076

... control or other speech-based capabilities into their products.
The L&H products -- including its **multi** -function, **multi** -lingual
voice processing PC board and voice processing modules, algorithms,
applications generation software and packaged systems - currently are used
in Europe in **telephone banking** , mail order response, voice mail and
other applications in which human speech reponse, voice mail...

19910408

9/3,K/93 (Item 23 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

04801643 SUPPLIER NUMBER: 09337865 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Europe '92: cultural borders will remain.
Futurist, v24, n5, p57(2)
Sept-Oct, 1990
CODEN: FUTUA ISSN: 0016-3317 LANGUAGE: ENGLISH RECORD TYPE:
FULLTEXT
WORD COUNT: 510 LINE COUNT: 00042

... as wen as within countries such as Belgium, where different
segments of the population speak **different languages** . For instance,
'smart **kiosks** ,' or interactive information terminals, can give expert
product-choice guidance to shoppers, operating in several languages
simultaneously. Interactive 'smart **kiosks** ' are far and away the best way
to cut through existing language and cultural gaps...

19900900

9/3,K/94 (Item 24 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

04610937 SUPPLIER NUMBER: 09173969 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Does retail banking travel well? (includes related article on market

niches) (part 2)

Hindle, Tim

EuroBusiness, v2, n8, p31(4)

May, 1990

ISSN: 0953-0711 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 1887 LINE COUNT: 00143

... be done by using local managers or local partners, or locally-installed technology.

For some, **telephone banking** is the distribution system of the future. If there were a pan-European freephone number then the possibility of distributing services from one **multi-lingual** centre could be contemplated. For the moment **telephone banking** must remain a long-shot.

Will banks be able to make money out of their...

19900500

9/3,K/95 (Item 25 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

03502433 SUPPLIER NUMBER: 06492815 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Simon Fraser University's new interactive learning system to teach French as a second language. (technical)

Kirchner, Glenn

Optical Information Systems, v8, n1, p38(6)

Jan-Feb, 1988

DOCUMENT TYPE: technical ISSN: 0886-5809 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 3159 LINE COUNT: 00247

...ABSTRACT: received a government grant to design an interactive learning system to teach French as a **Second Language**. The system was to be used as an individual workstation for one or two learners...

...Genlock, Sony 1000A, sound digitizer, amplifier and two speakers. All equipment is stored in a **kiosk** with access to programs via a mouse or keyboard. Utilizing a sampling rate of 28...

...material will be used to design three levels of instruction to learn French as a **Second Language**. (Reprinted by permission of the publisher.)

19880100

9/3,K/96 (Item 26 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2000 The Gale Group. All rts. reserv.

02183637 SUPPLIER NUMBER: 03556558 (USE FORMAT 7 OR 9 FOR FULL TEXT)

ICOT Corp.to market a new family of communications processors, the CrystaLink 5000 Series.

PR Newswire, SF1

Dec 10, 1984

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 705 LINE COUNT: 00061

The new family, called the CrystaLink 5000 Series, permits a **financial** institution's host mainframe to communicate with **ATM** 's in **bank** branches and POS devices in retail stores, through protocol conversion. (Protocol conversion allows computers that operate under

different languages to talk to each other.)

CrystaLink 5000 Series products also perform line concentration
(consolidating data...

19841210

9/3,K/97 (Item 27 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

02162555 SUPPLIER NUMBER: 03341934 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Coalition urges improvements at three N.Y. airports.

Travel Weekly, v43, p4(1)

July 5, 1984

ISSN: 0041-2082 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 433 LINE COUNT: 00035

... the region.

Expanded foreign currency exchanges at all airports and throughout
the region.

Traveler information kiosks and/or foreign language assistance
at major tourist centers within the region.

Speeded-up customs and immigration procedures for...

19840705

9/3,K/98 (Item 28 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2000 The Gale Group. All rts. reserv.

02117597 SUPPLIER NUMBER: 03551094

**Financial executives are intrigued with 'artificial intelligence': some
envision automated teller machines that can talk in different
languages and robots that can give advice.**

Furno, Daryl

American Banker, v149, p26(2)

Dec 5, 1984

ISSN: 0002-7561 LANGUAGE: ENGLISH RECORD TYPE: CITATION

**Financial executives are intrigued with 'artificial intelligence': some
envision automated teller machines that can talk in different
languages and robots that can give advice.**

19841205

9/3,K/99 (Item 1 from file: 553)

DIALOG(R)File 553:Wilson Bus. Abs. FullText
(c) 1999 The HW Wilson Co. All rts. reserv.

03272311 H.W. WILSON RECORD NUMBER: BWBA96022311 (USE FORMAT 7 FOR
FULLTEXT)

Retail stores of the year.

AUGMENTED TITLE: special report; cover story

Chain Store Age (Chain Store Age) v. 72 (Feb. '96) p. 4RSOY-80RSOY

LANGUAGE: English

WORD COUNT: 7361

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... The modern look of the store is reinforced by its high-tech emphasis. Interactive computer **kiosks** offer information relating to product characteristics and fit, and Levi's history. In addition, there are eight interactive **kiosk** directories (in four **different languages**) located on the ground floor to help direct shoppers. And a special computer in the...

1996

9/3,K/100 (Item 2 from file: 553)

DIALOG(R)File 553:Wilson Bus. Abs. FullText

(c) 1999 The HW Wilson Co. All rts. reserv.

03077040 H.W. WILSON RECORD NUMBER: BWBA95077040

Street smarts.

AUGMENTED TITLE: building an electronic City Hall

Sarna, David E. Y

Febish, George J

Datamation (Datamation) v. 41 (Oct. 1 '95) p. 31-2

LANGUAGE: English

...ABSTRACT: the private and public sectors cooperate. Thus, a contract to install computers in strategically placed **kiosks** has just been approved. Challenges facing ObjectSoft were to provide the public with something accessible...

...legacy systems; to provide central control and management to minimize costly service calls; to make **kiosks** accessible to as many people as possible, including those speaking **foreign languages** or challenged by physical disabilities; and to get these **kiosks** built and deployed quickly. The problems experienced in the project so far and the methods...

1995

?

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Document Number 42

Entry 42 of 61

File: USPT

Oct 20, 1998

US-PAT-NO: 5825003

DOCUMENT-IDENTIFIER: US 5825003 A

TITLE: Customer-directed, automated process for transferring funds between accounts using a holding account and local processing

DATE-ISSUED: October 20, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jennings; Horton	Chicago	IL	N/A	N/A
Pinnell; Nigel	Highland Park	IL	N/A	N/A
Do; Khanh	Rancho Palos Verdes	CA	N/A	N/A
Shah; Virendrakumar	La Palma	CA	N/A	N/A
Profumo; Marjorie	Santa Monica	CA	N/A	N/A
Downing; John	Old Windsor	N/A	N/A	GB2
Goodhand; Neil	Bracknell	N/A	N/A	GB2
Maino; Marion	Southold	NY	N/A	N/A
Thompson; Michael H.	Centereach	NY	N/A	N/A

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citicorp Development Center	Los Angeles	CA	N/A	N/A	02

APPL-NO: 8/ 795355

DATE FILED: February 4, 1997

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is a continuation-in-part to co-pending application entitled "A CUSTOMER-DIRECTED, AUTOMATED PROCESS FOR TRANSFERRING FUNDS BETWEEN ACCOUNTS VIA A COMMUNICATIONS NETWORK," Ser. No. 08/505,886, filed Jul. 24, 1995, now U.S. Pat. No. 5,659,165.

INT-CL: [6] G06F 17/60

US-CL-ISSUED: 235/379; 235/381, 902/5, 902/32

US-CL-CURRENT: 235/379; 235/381, 902/32, 902/5

FIELD-OF-SEARCH: 235/379, 235/375, 235/382, 235/380, 235/381, 902/4, 902/5, 902/14, 902/20, 902/24, 902/32, 395/200.01, 395/200.02, 395/200.03, 395/200.1, 705/42, 705/44

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3826344</u>	July 1974	Wahlberg	N/A
<u>4341951</u>	July 1982	Benton	235/379
<u>4498000</u>	February 1985	Decavele et al.	235/380
<u>4529870</u>	July 1985	Chaum	235/380
<u>4707592</u>	November 1987	Ware	235/379
<u>4766293</u>	August 1988	Boston	235/379
<u>4773001</u>	September 1988	Blair et al.	364/200
<u>4926368</u>	May 1990	Morita et al.	N/A
<u>5012076</u>	April 1991	Yoshida	235/379
<u>5025373</u>	June 1991	Keyser, Jr. et al.	N/A
<u>5326960</u>	July 1994	Tannenbaum	235/379
<u>5350906</u>	September 1994	Brody et al.	235/379
<u>5367561</u>	November 1994	Adler et al.	235/379
<u>5424938</u>	June 1995	Wagner et al.	364/408
<u>5440634</u>	August 1995	Jones et al.	300/24
<u>5448043</u>	September 1995	Nakano et al.	235/379
<u>5455407</u>	October 1995	Rosen	235/380
<u>5457305</u>	October 1995	Akel et al.	235/379
<u>5524073</u>	June 1996	Stambler	380/24

ART-UNIT: 286

PRIMARY-EXAMINER: Hajec; Donald T.

ASSISTANT-EXAMINER: Lee; Michael G.

ATTY-AGENT-FIRM: Marcou; George T. Kilpatrick Stockton LLP

ABSTRACT:

A system and method for allowing funds to be transferred instantly to an account so that the funds are available to the beneficiary at the time they are sent, based on customer information which can be automatically accessed by the system, rather than needing to be manually entered. Further, the system automatically computes the appropriate exchange rate and any fees to be charged to the account and displays them to the user so that the user may authorize or cancel the transaction. They system also analyzes the parameters of the transfer to assure that the transfer conforms with pertinent government regulations. The system also enables the user to quantify the amount to be transferred in the currency of the originating account or the currency of the receiving account, thereby maximizing the flexibility of the system. The system further is designed so that it can be understood and accessed by individuals having no special expertise in computers, wire transfers and the like. Further, the system is provided with various safeguards to assure that only authorized individuals have access to the accounts and the funds and immediately verifies successful completion or failure to the customer.

20 Claims, 18 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents
-----------	-------------	------------	----------------	----------------	-------------------

First Hit	Previous Document	Next Document
-----------	-------------------	---------------

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Help	Logout
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Document Number 42

Entry 42 of 61

File: USPT

Oct 20, 1998

DOCUMENT-IDENTIFIER: US 5825003 A

TITLE: Customer-directed, automated process for transferring funds between accounts using a holding account and local processing

PCPR:

This application is a continuation-in-part to co-pending application entitled "A CUSTOMER-DIRECTED, AUTOMATED PROCESS FOR TRANSFERRING FUNDS BETWEEN ACCOUNTS VIA A COMMUNICATIONS NETWORK," Ser. No. 08/505,886, filed Jul. 24, 1995, now U.S. Pat. No. 5,659,165. ✓

BSPR:

Currently, most consumer banking institutions utilize a network of automated teller machines (ATMs) which permit customers to more readily transfer funds between accounts. This permits the customer to perform such transactions substantially in real time (without any necessary time lag for settlement). Some systems now utilize ATM networks to permit a customer while in one country to access his or her account in another country. However, these systems do not provide the benefit of enabling one to conveniently transfer funds from an account in a first country to another account in a second country.

BSPR:

It is an object of the invention to overcome the shortcomings discussed above with a system for transferring funds instantly to an account maintained in the same or another bank business through the use of a terminal such as an ATM, home banking phone, personal computer, conventional telephone or the like. The system according to the invention allows funds to be transferred to an account based on customer information which can be automatically accessed by the system, rather than needing to be manually entered. Further, the system automatically computes the appropriate exchange rate and any fees to be charged to the account and displays them to the user so that the user may authorize or cancel the transaction. The system also analyzes the parameters of the transfer to assure that the transfer conforms with pertinent government regulations. The system also enables the user to quantify the amount to be transferred in the currency of the originating account or the currency of the receiving account, thereby maximizing the flexibility of the system.

DEPR:

FIG. 1 is a block diagram showing an overview of a system 20 according to the invention. Transfer transactions take place through an interaction between a user and a input computer terminal 22, for example, a home banking telephone, a personal computer (PC) or an ATM. In the preferred embodiment, this interaction is accomplished with a series of messages which are displayed to the user and various responses and requests which are input by the user through some type of input means such as a telephone keypad, a computer keyboard or a touch screen.

DEPR:

The input terminal communicates with a source front end processor computer (FEP) 24 through a series of electronic messages. In this example, the source or local FEP is coupled to a source banking system 26 and a remote FEP 30 through a network switch 28. As shown, the remote FEP 30 is connected to a destination banking system 32. For the purposes of processing transfers to external banking systems, the destination banking system 32 places transfer funds into a transfer holding account 34. The funds, for and external transfer, are then transmitted to the destination's local clearing system 36. Once processed through the local clearing system 36, the external transfer funds are deposited into the final destination external banking system 38. Accordingly, the various FEPs and the network switch together comprise an ATM network which may be accessed through various types of input terminals, including ATMs. Each element of this network includes suitable processing capabilities, including a CPU and associated memory. For example, in the preferred embodiment, several computer systems offered by STRATUS.RTM. are utilized.

DEPR:

The input terminal referred to in FIG. 1 may comprise any of a variety of devices. In a preferred embodiment of the invention, it is contemplated that a particular type of ATM developed by the present assigned be used. This type of ATM is referred to herein as a customer activated terminal (CAT). Unlike many other ATMs which function primarily or solely as cash dispensing machines, CATs provide a wide range of banking functionality. These include "basic" services such as cash withdrawal, deposits and payments, transfer between accounts, balance inquiries, transaction histories, and purchases of travelers checks. As shown in FIG. 3, a CAT 40 includes structures generally corresponding to those found in a conventional ATM to carry out these functions. Standard structures include a magnetic card reader 48 for reading information encoded on a customer's card, a depository 52 for accepting deposit and payment envelopes, a cash dispensing mechanism 44 and a printer (not shown). Internal components include a processor 42 and a communications device 50 for data communication with a front end system 54. Memory devices associated with the processor 42 are also provided in order to permit the CAT to operate in the manner described herein.

DEPR:

The CAT 40 also utilizes more advanced structures in comparison to many conventional ATMs. For example, the primary customer interface is a dynamic touch screen 46 which utilizes color graphics. This interface is more versatile than many other ATMs in that it is readily reconfigurable. This permits the CAT to more easily accommodate newly developed functionality. Moreover, it provides an interactive display in which buttons and keys are replaced with images of familiar three-dimensional objects.

DEPR:

The regional application 68 serves many functions. For example, it determines the language for the on-line session with the customer. More specifically, it enables the session to be conducted in a selected language based on the origin of the customer's card. For instance, if a customer from France accesses a CAT in Germany, the regional application run by the German CAT would run the on-line session in the French language based on the Level 1 identification of the customer's card as originating with a French financial institution.

DEPR:

A more specific description of the interface between the user and the system described above is now described with reference to FIGS. 6 to

14. While this process is particularly well suited for implementation with the aforementioned CAT, it will be appreciated by those skilled in the art that a variety of terminals are available for implementing the process described below including personal computers and home banking telephones.

DEPR:

As shown in FIG. 10, at Step 601, the system determines whether the transaction selected is an Inter-Bank External Transfer. If the transaction is an Inter-Bank ET, then at Step 603 the system sets the transaction currency to the currency of the transaction destination and then continues processing at Step 608. Otherwise, at Step 602 the system determines whether the requested source and destination currencies are the same. If they are the same, the process continues with Step 606. If the source and destination currencies are not the same, for example, if a transfer is being made from an account in a first currency to an account in a second currency, then the process continues with Step 604. At Step 604 the CAT prompts the customer to indicate the type of currency the customer wishes to use to specify the amount to be transferred. For example, if the customer wishes to transfer an amount from an English account (based on pounds) to a French account (based on French francs), the customer can indicate the customer's preference for the currency in which they will specify the amount to be sent. For example, a screen such as the one shown below may be displayed to the customer where the data elements "curr.sub.-- desc1" and "curr.sub.-- desc2" correspond to textual descriptions of the respective currencies used in the source and destination countries:

DEPR:

FIG. 15 illustrates a system 125 for implementing regional transfers in accordance with the process described above. In this example, a CAT 128 in France is connected to a French FEP 130 which in turn is connected to a French host system 132 associated with a French banking institution.

DEPR:

In this example, the user of the French CAT 128 can perform regional transfers as described above through a communications network 134. This communications network 134 links the French FEP 130 with several others FEPs in the same region, for example a German FEP 138, a UK FEP 142, a Belgian FEP 146, a Spanish FEP 150, a Greek FEP 154, and a Luxembourg FEP 158 (140, 144, 148, 152, 156, 160). Each of these FEPs is connected to a indicated at 136 in FIG. 15, the communications system also permits access to other regional systems in order to provide limited international transactions as referred to above in FIG. 4.

DEPR:

In accordance with the invention, this system enables a customer in France to make transfers to another account with a financial institution running in another country. For example, the French customer might request a regional transfer from a checking account with a French bank associated with French host 132 to a Spanish bank associated with Spanish host 152. The French CAT 128 would then implement the process described above with reference to FIGS. 6 to 14. Specifically, after proceeding through the identification and validation procedure described above, the customer would select a recipient business and provide a recipient name in Spain, and an account number for an account in Spain. In response to the French CAT's request, the communications system 134 would obtain and provide to the French FEP 130 the current exchange rate for exchanging French francs for Spanish pesetas, and any applicable fees. This information would be provided in either francs or pesetas at the customers choosing. Once the customer has viewed the exchange rate and approved

the transaction, the customer then requests that the transfer be implemented.

DEPR:

At this point, a transfer request message is sent from the French CAT 128 to the French FEP 130. The French 130 then contacts the French host 132 in order to debit the customer's French account. After the French account is debited, the French FEP 130 sends a message to the communications systems which is passed along to the Spanish FEP 150. The Spanish FEP 150 receives this message and provides it to the Spanish host 152. In response, the Spanish host 152 implements the credit to the destination account.

DEPR:

In this example, the Spanish host 152 provides a response to the Spanish FEP 150 which is transmitted through the communications system 134 to the FEP 130. The French FEP 130 then sends the response to the French CAT 128. Next, the French CAT 128 checks this response in correspondence with Step 234 of FIG. 6 (described in detail in reference to FIG. 13). The French CAT 128 then displays a final message indicating whether or not the requested transfer has been implemented.

DEPR:

Additionally, FIG. 15 illustrates a system 125 for implementing Inter-Bank External Transfers in accordance with the process described above. In this example, a CAT 128 in France is connected to a French FEP 130 which in turn is connected to a French host system 132 associated with a French banking institution.

DEPR:

In this example, the user of the French CAT 128 can perform Inter-Bank external transfers as described above through a communications network 134. This communications network 134 links the French FEP 130 with several other FEPs in the same region, for example a German FEP 138, UK FEP 142, a Belgian FEP 146, a Spanish FEP 150, a Greek FEP 154, and a Luxembourg FEP 158 (140, 144, 148, 152, 156, 160). Each of these FEPs is connected to a host system associated with a particular banking institution. Each FEP is also connected to the location's Local Clearing System (139, 143, 147, 151, 155, 159) which is then providing a transfer connection to an External Banking System (141, 145, 149, 153, 157, 161).

DEPR:

In accordance with the invention, this system enables a customer in France to make transfers to another account with an external financial institution running in another country. For example, the French customer might request a regional transfer from a checking account with a French bank associated with French host 132 to an external Spanish bank 153 connected with the Spanish Local Clearing System 151. The French CAT 128 would then implement the process described above with reference to FIGS. 6 to 14. Specifically, after proceeding through the identification and validation procedure described above, the customer would select a recipient business and provide a recipient name in Spain, and an account number for an account in Spain. In response to the French CAT's request, the communications system 134 would obtain and provide to the French francs for Spanish pesetas, and any applicable fees. This information would be provided in the destination currency of pesetas for use in an external transfer. Once the customer has viewed the exchange rate and approved the transaction, the customer then requests that the transfer be implemented.

DEPR:

At this point, a transfer request message is sent from the French CAT

128 to the French FEP 130. The French 130 then contacts the French host 132 in order to debit the customer's French account. After the French account is debited, the French FEP 130 sends a message to the communications systems which is passed along to the Spanish FEP 150. The Spanish FEP 150 receives this message and provides it to the Spanish host 152. In response, the Spanish host 152 implements the credit to a transfer holding account.

DEPR:

In this example, the Spanish host 152 provides a response to the Spanish FEP 150 which is transmitted through the communications system 134 to the French FEP 130. The French FEP 130 then sends the response to the French CAT 128. Next, the French CAT 128 checks this response in correspondence with Step 234 of FIG. 6 (described in detail in reference to FIG. 13). The French CAT 128 then displays a final message indicating whether or not the requested transfer has been implemented.

DEPR:

To complete the Inter-Bank External Transfer, the Spanish FEP 150 communicates the transaction's information about the amount, source account, destination account, and any attached messages to the Spanish Local Clearing System 151. The local clearing system will process the requested transfer of funds between banking systems and post a credit of the transfer amount to the destination account within the Spanish External Banking System 153.

DEPR:

Subsequent to this procedure, the communications network is used to automatically perform a settlement procedure between the French host 132 and the Spanish host 152 for the above-described transaction and others which may have occurred. This settlement procedure occurs on a periodic basis, for example, a daily basis, in accordance with techniques known in the art. Similarly, authorized personnel perform an end-of-the-day process 126 to reconcile transactions implemented with the French CAT 128 with the French host 132 through French FEP 130.

CLPR:

5. The process according to claim 1, wherein said input terminal is an automated teller machine.

CLPR:

8. The process according to claim 7, wherein the input terminal is an ATM that includes a card reader for reading encoded data corresponding at least in part to the first data, the encoded data including a number indicative of the financial institution issuing a card that is read by the card reader, wherein the currency of the source account is obtained by referencing said encoded data with a recorded table of financial institutions.

CLPR:

10. The process according to claim 1, wherein the input terminal comprises a home banking telephone.

CLPR:

15. The system according to claim 11, wherein said input terminal is an automated teller machine.

CLPR:

18. The system according to claim 17, wherein the input terminal is an ATM that includes a card reader for reading encoded data corresponding at least in part to the first data, the encoded data including a number indicative of the financial institution issuing a card that is read by the card reader, wherein the currency of the

source account is obtained by referencing said encoded data with a recorded table of financial institutions.

CLPR:

20. The process according to claim 11, wherein the input terminal comprises a home banking telephone.

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC

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Document Number 50

Entry 50 of 61

File: USPT

Mar 25, 1997

US-PAT-NO: 5615257

DOCUMENT-IDENTIFIER: US 5615257 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

DATE-ISSUED: March 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pezzullo; William V.	Bromley	NC	N/A	N/A
Brisebois; Michel J.	Chelsea	N/A	N/A	CAX
Johns; Joseph B.	Calgary	N/A	N/A	CAX
Orford; Kenneth M.	Kanata	N/A	N/A	CAX
Travis; Kristin J.	Nepean	N/A	N/A	CAX
Tsuji; Bruce H.	Nepean	N/A	N/A	CAX
Ross; William T.	Dunrobin	N/A	N/A	CAX
Robert; Andre J.	Woodlawn	N/A	N/A	CAX
Read; Clifford D.	Stittsville	N/A	N/A	CAX

ASSIGNEE INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Northern Telecom Limited	Montreal	N/A	N/A	CAX	03

APPL-NO: 8/ 354599

DATE FILED: December 13, 1994

FOREIGN-APPL-PRIORITY-DATA:

FOREIGN-PRIORITY:

FOREIGN-PRIORITY-APPL-NO: CA 2112757

FOREIGN-PRIORITY-APPL-DATE: January 4, 1994

INT-CL: [6] H04M 1/56, H04M 1/27, H04M 11/08

US-CL-ISSUED: 379/396; 379/96, 379/97, 379/112, 379/201, 345/10

US-CL-CURRENT: 379/396; 345/10, 379/112, 379/201, 379/93.17

FIELD-OF-SEARCH: 379/396, 379/97, 379/399, 379/395, 379/94, 379/96, 379/201, 379/215, 379/127, 379/351, 345/10, 345/123, 345/124, 345/130, 345/146, 345/168, 345/169, 345/172, 395/156, 340/712

REF-CITED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5263084</u>	November 1993	Chaput et al.	379/215
<u>5392337</u>	February 1995	Baals et al.	379/396
<u>5402477</u>	March 1995	McMahan et al.	379/201

ART-UNIT: 261

PRIMARY-EXAMINER: Brown; Thomas W.

ASSISTANT-EXAMINER: Saint-Surin; Jacques M.

ATTY-AGENT-FIRM: Vigil; Thomas R.

ABSTRACT:

An interactive subscriber telephone terminal, comprising: a display screen; a plurality of temporarily definable response/data entry keys; and local control means for selectively causing the display screen and/or the response/data entry keys to be controlled by one of: remote signals transmitted to the terminal from a telephone switching office, and the local control means.

7 Claims, 17 Drawing figures

Main Menu	Search Form	Result Set	Show S Numbers	Edit S Numbers	Referring Patents				
First Hit		Previous Document		Next Document					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RWC
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[Title](#)
[Citation](#)
[Front](#)
[Review](#)
[Classification](#)
[Date](#)
[Reference](#)
[Claims](#)
[KWC](#)

Document Number 50

Entry 50 of 61

File: USPT

Mar 25, 1997

DOCUMENT-IDENTIFIER: US 5615257 A

TITLE: Screen-based telephone set for interactive enhanced telephony service

BSPR:

In the ESP market. ADSI capability opens the door to many potential display-based services, such as catalog shopping, home banking, entertainment reservations, and (combined with broadcast access) selection of pay television programs, as well as such information services as stock and weather reports.

BSPR:

And, third parties can immediately deploy display-based enhanced services, such as home banking, by building on interactive voice-response systems already located in their premises.

DRPR:

FIG. 3 is a diagrammatic summary of state machine (SM) interactions underlying the ADSI terminal and telephone network interactions;

DEPR:

The ADSI User Interface state machine (UISM) processes all remaining events of interest, routing them as appropriate to the softkey script or service script interpreter state machines. It maintains some of the state information for each of the associated state machines, and coordinates any communications between them. An additional sub-task of this state machine is to provide a digit collector mechanism.

DEPR:

The UISM activates and modifies the softkey state machine (SKSM) by routing softkey or cursor events to it. Only one invocation of an SKSM will ever exist at any one time. Even when a sub-script is specified, it is not executed until after the current script has been completed. Practically speaking each invocation of the SKSM has a short life. It lives only until the end of the script or until the user goes on-hook, with virtually every command being immediately executable. The only exception is "Dial Tone Detect", which has a 3 second time-out.

DEPR:

The FDM Service Script state machine (FSSM) is activated by softkey events when the FDM UI state is active, as determined by the UISM. Network, timer, hookswitch and softkey script events may modify the sequence of a service script and the state of the FSSM. As with the SKSM, only the service script may be active at one time, however, many sub-scripts may be nested so the FSSM must maintain state information for every level of sub-script.

DEPR:

ADSI services enable subscribers to access and control such services as home banking, and to interact with display and audio information from a switch or server.

DEPR:

To compete successfully operating companies are seeking cost-effective terminals to support the variety of new services now being introduced. Cost considerations are critical particularly in lease markets because operating companies must assume virtually all of the technology risk. Compared with consumers who buy terminals, leasers are less likely to retain their telephones because they do not have to make capital investments to replace them. Because operating companies assume the technology risk in a lease market, the impact of service and terminal evolution on consumers is minimal. The major issue for users is integrating the many available leased and retail products, such as telephones and answering machines, into one cost-effective communications platform.

DEPV:

ADSI User Interface State Machine (SM);

DEPV:

Display information in English, French, or Spanish;

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00285353 (THIS IS THE FULLTEXT)

Home banking lite

Cohen, Jackie

Bank Technology News, v9, n4 , pl,18+

Apr 1996

TEXT:

Here's an eye opener for banks trying to convert more of their customer base to PC banking: Less than a third of people who already own PCs consider themselves to be computer competent, according to Charles Kreitzberg, president of Cognetics Corp., Princeton Junction, NJ, a software design consultancy. Keeping in mind only 28 percent of Americans own PCs to begin with, that means that a mere ten percent of the population feels at home with a computer.

A booming market for PC banking? Not really, especially when you consider the context. "Anxiety is higher than average [with PC banking] because consumers' money is involved," notes Kreitzberg. "Do you trust ten years of your financial records to your PC? Most people would rather have it in their hands, so that when the IRS shows up, you know you have the stuff."

Perhaps more important than overcoming the consumer-anxiety factor is the task of making PC banking functions relevant to how consumers want to do their banking. Indeed, most of the population--75 percent, according to Eric Jacobsen, president of Home Financial Network --don't even bother to balance their checkbooks. Not surprisingly, the eyes of these consumers glaze over when they see the charting, graphing and budget allocation capabilities of advanced personal financial packages like Microsoft Money and Intuit's Quicken.

"We don't see a groundswell of consumer support for PC banking because of a lack of relevance to people's lives on a daily basis," says Kreitzberg. "The issue is making it usable so that the person who doesn't care about charts and graphs won't have those functions getting in their way. That doesn't necessarily mean leaving them out, it means presenting them in a way that doesn't impede the user."

Heeding the call for simplicity, vendors are introducing a new generation of PC banking packages. Oddly enough, these "latest generation" packages are a retreat from much of the industry's first round of offerings, because they provide far simpler, stripped-down approaches to home banking. This new, "lite" approach to home banking may well provide the mass appeal necessary to make home banking profitable.

One of the newest offerings to cater to this craving for simplicity comes from Home Financial Network, formerly known as HomeNet. The new company's "singular purpose is to create very simple, single-function, elegant, mini applications for banks to provide their customers on a bank-branded basis," says Jacobsen. "Just taking the traditional high-end PC application and stripping out functionality doesn't by itself make it easier to use. There are many players creating miniapps, and we are approaching this category in a very different way."

Five banks already have signed up for the company's first two products, Home ATM and Home Pay, which will be available in July. Home ATM is indeed, wildly simple in its approach. "We customize the bank's PC screens to look just like their ATM screens," explains Jacobsen. The solution is not only bank-branded, but familiar to customers and comfortable to use. Users point and click their way through sequences they already know to obtain balance information, download statements, transfer money between accounts and stop payments. Home Pay also uses point-and-click icons to guide users through scheduling and paying.

Future versions of the application will load onto smart cards swiped through card readers provided by another vendor. The application will also be available in Internet versions, allowing banks to deploy turnkey branded Web sites programmed in Java (see BTN, March 1996). Future releases will include a mutual funds product, an electronic loans application and insurance software. On the back end, the products will link to whichever processor a bank wants to use, so it can retain its payment relationships, says Jacobsen, who asserts the initial outlay cost to the bank will be "25 percent of what Intuit charges."

Roofs in Meca

Westport, CT-based Home Financial Network was founded in September 1995 by Dan Schley and Eric Jacobsen, both of whom hail from Meca Software, Schley as Meca's chairman and CEO, and Jacobsen as Meca's vice president of marketing. During their years at Meca, the two helped pull the company's profits from negative numbers to \$40 million in annual revenues by the time they sold it.

Schley was a cofounder of Meca and ultimately acquired it in 1987; one year later, Jacobsen hopped aboard and became a co-owner. After taking the company public in 1990 and then selling it to H & R Block in 1993, the duo left the company within about a year of each other. After a stretch of market research, the two formed HomeNet with a \$5 million investment from the screenphone manufacturer U.S. Order, Herndon, VA. In the meantime, Bank of America and NationsBank bought Meca in summer 1995. Since then, Fleet Financial Group, First Bank System and Royal Bank of Canada have joined the new Meca ownership pool.

Market knowledge

Having spent so many years toiling in the mass-consumer software market, Schley and Jacobsen are confident they know their market well. "Ten to 15 percent of customers are interested in personal financial management programs [like Quicken and Money]," says Jacobsen. "That percent of the market are financially and technically sophisticated people who want absolute and total control of their money. They love to balance their checkbook and allocate transactions to budget categories. They'd rather spend two hours on Sunday playing with their money on their computer than going to the beach."

This, Jacobsen asserts, is not the market Home Financial Network is targeting. "The majority of customers just want to do things like shift money from checking to savings." Using an advanced financial program for that "is like using an atom bomb to kill a flea." In contrast, Home Financial Network is targeting the mass market, which, Jacobsen notes, happens to be purchasing the most new PCs.

In devising its distribution plan, Home Financial Network has kept certain key characteristics of the mass market in mind. "This market is not made up of 'tryers' of new things," notes Jacobsen. "They won't venture into PC banking unless a bank gives them the software. They need that seal of endorsement from the financial institution." For that reason, Home Financial Network's products are strictly bank-branded.

Sharing the market

Home Financial Network is very comfortable sharing the home banking market with advanced packages like those from Microsoft and Intuit, which target the top end. "Intuit and Microsoft own that market and we're not going to get it," Jacobsen asserts. Nonetheless, "financial institutions are going to have to sign up with Microsoft and Intuit to accommodate their important customers who already own the packages and want access to the bank. And if they haven't done it yet, they better." However, Jacobsen calls it "mind-boggling" that an institution would choose to give away a Microsoft or Intuit package to new home-banking customers. "They should be distributing their own private label, so they're promoting their own solution."

The strategy of pleasing all customers by offering both leaded and unleaded versions of PC banking is likely to be adopted by many. "I think banks shouldn't decide on one front-end interface over the other," says Kevin Curtis, an analyst at the Yankee Group in Boston. "Banks should accommodate whatever front-end interface a customer chooses, and enable it, rather than force a particular platform on the customer."

NationsBank, for one, is taking steps in this direction. "We're trying to offer a range of different solutions," says Chuck Hieronymi, senior vice

president for customer access development at the \$180 million-asset bank. "There's not one solution or device that's going to appeal to everyone. So we're trying to take a very customer-focused approach to the access channels we develop, including branches, ATMs, telephones, screenphone and the PC, including software and the Internet. We're trying to create differentiated value propositions targeted at each customer segment, and offer customers a choice of channels."

NationsBank, one of the original bank owners of Managing Your Money, unveiled in February its customized version of Managing Your Money, which facilitates both "lite" and advanced-function PC banking. Customers can preset the software to do only "lite" banking. Or, they can select the full suite of budgeting, investment management and financial calculator features.

On booting up the first time, the software displays a room with a desk and books that NationsBankers say has a friendly look to it. The user clicks on different parts of the room to access different aspects of the software. For example, clicking a telephone icon calls up a list of all of NationsBank's 800 numbers. Clicking on an icon of a NationsBank sign calls up an image of the NationsBank PC banking center.

Once on the NationsBank PC banking-center screen, users can get the "lite" only effect. Six buttons will pop up: e-mail; funds transfers; bill payments; balance information; transaction data, and for connecting to the bank to send or receive data. This last option exists because most of Managing Your Money actually runs offline, until users are ready to, say, send bill payment information to the bank, or download transaction data from the bank.

For non-lite functions, users can select options from the drop-down menus at the top of the screen. All of a customer's NationsBank transactions will automatically flow through the software, so consumers can, if they want, take advantage of charting and graphing capabilities to manage all of their accounts, from savings to credit cards to loans. Investment management capabilities will soon be on board, along with an online stock quote service. In the future, customers will be able to make trades.

NationsBank is distributing the software free for a limited time. Account information services are de gratis, while bill payments cost \$5.95 a month for 20 payments. These bill payment fees will be waived for customers who maintain a certain minimum balance, which varies from state to state. The service began in Texas this March, and will be available in the Carolinas in May, and throughout the full franchise by year end.

For the actual payment: processing, NationsBank relies on its internal bill payment group, as it has for the past 15 years. The group sends 47 percent of its payments electronically and the rest by individual paper checks, rather than lump check payments. The group's error rate is less than one percent, says Hieronymi.

Visa lightens up

Other banks and vendors also are lightening up their approaches to home banking. In October, Visa Interactive introduced lite home banking software called VIPC. The product "is designed for the person who just wants to pay bills and get some basic statement information," says Brent Robinson, senior vice president of Visa Interactive. "And we think that's the majority of the marketplace. What good does it do to feed households huge applications, when all consumers want is to make life easier? All they want is convenience and a little more control." VIPC also lets banks control the branding and distribution of the product.

To accommodate consumers who desire more advanced home-banking functions, Visa Interactive has forged a link with Microsoft Money (see story, page 10). Money transactions can now be processed via Visa's back-end Epay system, in addition to existing processing options. At the same time, Visa Interactive will be able to offer the Money front-end to banks already using its home-banking platform. "We have done lots of consumer research around the world, verifying that clearly there are multiple segments of consumers likely to sign up for remote banking," says Greg Jones, a spokesman for Visa. "For that reason, Visa Interactive believes it's very important financial institutions offer multiple devices. You can segment customers to determine which front-end device they most prefer."

Research that Visa performed last year found that 74 percent of consumers around the globe would participate in remote banking of any sort. Of those, 30 percent preferred any PC application, both lite and non-lite; 22 percent preferred the screenphone, and 21 percent liked the super-simple touchtone phone. The overwhelming majority preferred remote banking and bill payment combined.

No bills in the mail

Zions Bank, Salt Lake City, has named its VIPC product the Zions Bank PC Banker. Zions has also integrated its touchtone phone service onto the Visa Interactive platform, coining it Zions Bank Bill Payment service. Since their activation in December, they've been "very popular," says Bill Hall, senior vice president in charge of electronic delivery at the \$6 billion bank.

Besides favoring the bank-owned card association as a provider of its PC banking software, Hall is looking forward to the addition of electronic bill presentment to the software. This is a feature that Visa will soon integrate into its Epay platform in the not-so-distant future. If it flies, it will make bill payments painfully simple. Customers won't even receive bills in the mail; they will receive them via e-mail and pay them electronically. "We're looking forward to that enhancement," says Hall.

ATM routing scheme

Another home banking provider, Online Resources & Communications, Inc., has also adopted the strategy of mirroring ATM transactions on alternate channels. Not only do transactions look and feel like ATM transactions, but the McLean, VA-based vendor routes payments through a regional ATM switch, so banks don't have to revert to a payment processor on the back end. On the front end, consumers enter their ATM personal identification numbers (PINs) before engaging in transactions over the touchtone phone, screenphone, PC, and, next quarter, the Internet.

Lite approaches may be just the thing to get the ball rolling toward mass consumer acceptance of PC banking. The technology "is just hitting its stride in terms of mass appeal," notes Jim Beams, an analyst at The Tower Group, in Wellesley, MA. "You're going to see a big push in college scenarios to get potential big earners hooked early on PC banking."

Most important, many of the home banking signers-on will be first-time PC users, says a study by Forrester Research, Cambridge, MA. About 28 percent of Americans now have PCs, totalling 32 million units, but market penetration will hit 64 percent by the year 2000. That year, 80 percent of PCs will be equipped with modems, ready to roll for online services.

If that potential market pans out, banks may well be facing a booming market for PC home banking. Given the right "lite" tools, they should be able to exploit it.

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ISA Conference - Prodigy, AOL, 9 Others Win Awards.
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TEXT:

BOSTON, MASSACHUSETTS, U.S.A., 1995 JUL 14 (NB) -- Prodigy, America Online (AOL), Northern Telecom, Visa Interactive, MCI, CBS, Fox, PC Financial Network (PCFN), BFD Productions Networks/WLUP-FM, Northern Telecom, and a top Nynex official were all named winners in the Interactive Services Association (ISA)'s 1995 awards competition, during a ceremony at the 10th annual ISA Conference in Boston.

Prodigy is a winner in a pair of categories. Prodigy Services Company received the ISA's Outstanding Achievement Award, presented to "recognize an organization for its pioneering efforts, leadership, persistence, and outstanding accomplishments over the years."

In addition, the Prodigy World Wide Web Browser was given the ISA's prize for "Online and Internet Innovation." In making this award, ISA judges noted that Prodigy has become the largest dial-up Internet access provider, with 700,000 subscribers now using its browser.

Prodigy's success on the Web was attributed to "using the least- cost route." Prodigy "placed its bets early and used a tiny development staff," the judges added.

AOL will take home the prize for "Online and Internet Design" for its new Multimedia Software. The judges described AOL's new GUI (graphical user interface) as "crisp, colorful, and easy to navigate." Since introducing the new software to its online service, AOL has added one million new subscribers in less than one month, according to the officials.

PCFN got the ISA's nod for "Online and Internet Best Application." Initially unveiled on Prodigy in 1990, PCFN is now considered the largest online brokerage service. The judges praised the service as "an excellent example of how the online medium can add great value to a function that is traditionally telephone-based."

Fox, CBS, BFD/WLUP-FM, and Visa Interactive all earned prizes for other "killer apps." Fox's Melrose Place Interactive Radio Game, which was produced by Interactive Marketing Inc., was honored in the category of "Interactive Marketing: Best Online Business-to- Consumer Application."

Dubbed by the judges a "unique, localized approach," Fox's promotion offered radio listeners a chance to win a trip to a Melrose Place party by calling a local number to answer multiple- choice trivia questions about the primetime soap opera. The callers' answers triggered pre-recorded response from the Melrose Place actors.

Installments of Melrose Place aired after the Fox promotion reportedly received the highest ratings ever for the TV series. The promotion was also credited with allowing Fox "to collect accurate and immediate feedback about the effect of each radio station's participation."

CBS was recognized for CBS Marketing Interactive on Prodigy, a service introduced in February, 1994, as well as for CBS Eye on the Net, a Web version launched a year later. The Prodigy edition has generated more than 4.5 million "hits," permitting the service to sell "substantial amounts of advertising," according to the ISA officials.

The CBS Web site is regarded as the first "full-time presence on the Web" by a TV network. The two services from CBS shared this year's ISA award for "Interactive Marketing: Best Online Business- to-Consumer application."

BFD and WLUP-FM ("The Loop" Radio) teamed on The Loop Phone Shopping

Network, winner of the ISA award for "Interactive Telephone Best Application." The service, which uses AT&T Vari-a-Bill, is designed to let callers dial a 900 number, listen to music samples from CDs, and buy the CDs -- as well as T-shirts, hats, and videos -- on the same phone call, with all charges appearing on the caller's phone bill, instead of a credit card bill.

This year's award for "Screen Telephone Best Application" went to Visa Interactive for its Remote Banking Application on PhonePlus, an application that has now been deployed in more than 50,000 homes across the US. The judges commended Visa for the "pioneering" approach of using an ATM (automated teller machine)-like interface that is designed with consumer "ease-of-use" in mind.

Also in the screen phone arena, Northern Telecom's Nortel PowerTouch 350 Screen Telephone took applause from the judges for its "breakthrough" design. The new phone, winner of the ISA's "Screen Telephone Innovation" award, features a backlit screen, as well as a modular design aimed at gradual upgradability to "new functionality and applications."

The prize for "Interactive Telephone Design" went to Nickelodeon's Slime Time Sweepstakes, produced by Interactive Marketing Inc. In the sweepstakes, kids were asked to call a 900 number to enter. Fifteen entrants, chosen at random, were then given video phones for use in playing games "live on the air." The ISA judges reported that the videophone design "made it easy for the kids to use, worked within the current technology, and was extremely attractive to kids."

In another aspect of telephony, MCI received the "Interactive Telephone Innovation" award for its 1-900-GET-INFO service. This service provides long-distance information for 75 cents, plus an offer to connect the call. Referring to the 900 service "an easy way to find a number and place a call," the judges pointed to the offering as exemplifying MCI's "commitment to the pay-per-call industry."

Also at the ceremony, Kingsley "King" Nelson, VP of interactive services for Nynex, received the ISA's Distinguished Service Award, in recognition of his contributions to both the ISA and the interactive services industry.

Nelson previously served as product manager for 976 services and as head of new product development for Nynex, before moving to his current position, in which he is responsible for new business development and for Nynex's move into interactive video.

(Jacqueline Emigh/19950714/Reader and Press Contact: Interactive Services Association, 301-495-4955)

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Citibank Ends Fees for Most Electronic and ATM Services
American Banker - May 24, 1995; Pg. 1; Vol. 160, No. 98
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By MATT BARTHEL

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TEXT:
Making a bold play for customers in the hotly contested remote banking field, **Citibank** has eliminated **fees** on the majority of its electronic banking services.

Beginning in June, **Citibank** customers, regardless of their account balances, will no longer have to pay monthly or transaction-based **fees** for banking through automated teller machines, personal computers, or screen phones.

A spokeswoman said the nation's largest bank will lose just under \$10 million in annual revenues as a result of the fee eliminations. "But we feel we can make that up by getting customers to do more with us and by attracting new customers," she said.

With the move, observers said, **Citibank** is reclaiming the electronic banking leadership role it played in the late 1970s and early 1980s.

By scrapping charges in one fell swoop, the bank is bucking a trend toward ratcheting up remote-banking **fees** - especially those for ATM and point-of-sale transactions. Its move is expected to have a ripple effect on pricing in the New York market, and perhaps beyond.

Two of **Citibank**'s closest competitors, Chase Manhattan Corp. and Chemical Banking Corp., declined to comment on the action.

Citibank has already been more successful than most at getting customers to use low-cost electronic delivery channels.

Roughly 80% of the bank's retail transactions are conducted with electronic delivery mechanisms, according to **Citibank** executives. This compares to an industry average of 55%, according to Liam Carmody, a principal with Carmody & Bloom, a consulting firm in Ridgewood, N.J.

The move should encourage more customers to move away from teller-assisted transactions, which are among the most costly in retail banking, Mr. Carmody said. "It's part of the basic philosophy of switching customers away from where costs are."

Still, **Citibank** officials took pains to say they are not turning their backs on customers who want to deal with tellers.

"We will not be considering increased **fees** " at the teller line, said Noreen Dalpiaz, a vice president at **Citibank**. First Chicago Corp. ran into

a firestorm of criticism last month when it began charging some customers **fees** for using tellers.

Ms. Dalpiaz said that in addition to increasing market share, free electronic services will help to reduce branch costs: "Obviously, when you handle these transactions in an electronic way, it's a cost-effective method."

But she declined to be specific about teller staff reductions. She acknowledged that the new fee schedule may allow **Citibank** to expand a program already under way in which tellers handle a wider array of transactions.

The new pricing scheme is comprehensive.

Transactions conducted by customers at Citicorp-owned automated teller machines will now be entirely free. In the past, such transactions carried

a 35-cent fee for customers with less than \$2,000 in their checking accounts or less than \$6,000 in combined deposits. The \$1 fee that some **Citibank** customers pay to use other banks' ATMs will remain in place.

PC-based banking and bill payment services, which had carried 35-cent transaction **fees** and monthly charges of \$9.95 and \$3.50 respectively, will also be free.

In a bid to attract corporate customers, the bank also dropped the \$55 monthly fee from its PC-based service for small businesses.

Retail point of sale transactions and touch-tone phone services will continue to be free.

Not everyone believes the fee eliminations are a smart move.

Richard Robida, an electronic banking consultant with Atlanta-based Speer & Associates, said that if the bank acquires customers at the low end of the deposit spectrum and earns the normal spread of 2% on its deposits, it will be hard pressed to offset the cost of even electronic transactions that such customers will generate.

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